DOCUMENT RESUME

ED 257 948 CE 041 576

AUTHOR Camp, William G., Comp.
TITLE Summaries of Research and Development Activities in Agricultural Education in the United States of America, 1982-1983.
INSTITUTION Virginia Polytechnic Inst. and State Univ., Blacksburg. Div. of Vocational-Technical Education.
SPONS AGENCY American Vocational Association, Arlington, VA. Agricultural Education Div.
PUB DATE Feb 84
NOTE 124p.; For related documents, see ED 134 707, ED 151 532, ED 167 781, ED 187 894, ED 205 706, ED 223 774, and CE 041 577.
PUB TYPE Reference Materials - Bibliographies (131) -- Information Analyses (070)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Abstracts; Action Research; *Agricultural Education; Classroom Research; Curriculum Development; Curriculum Research; Demography; Doctoral Dissertations; *Educational Development; *Educational Research; Instructional Development; Instructional Materials; Masters Theses; Material Development; Methods Research; Needs Assessment; Operations Research; Outcomes of Education; Postsecondary Education; *Research and Development; *Research Projects; Secondary Education; Test Construction; Trend Analysis; *Vocational Education

ABSTRACT

This document summarizes 161 research and development activities in agricultural education that were completed between July 1, 1982, and June 30, 1983. The projects, which are listed by state, represent research and development efforts undertaken at 34 institutions in 30 states and include 78 master's studies or theses, 37 doctoral dissertations, and 39 funded or unfunded staff project studies. Each project summary contains the names of the individual or individuals primarily responsible for the project, a project title, information concerning the type of project, the sponsoring institution, and an abstract. Also included in the document are a list of 173 studies or projects in progress during the period under examination, a list of ERIC document numbers for previous regional and national summaries, a list of previous national editors, an author index, and a subject index. (MN)

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Virginia Polytechnic Institute & State University
Blacksburg, Virginia

CE041576

SUMMARIES OF RESEARCH AND DEVELOPMENT ACTIVITIES IN AGRICULTURAL EDUCATION

in the

United States of America

1982-1983

Compiled and Edited

by

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February, 1984

PREFACE

This document is the eighth annual Summaries of Research and Development Activities in Agricultural Education in The United States. Section 1 lists 161 abstracts representing studies and developmental projects completed between July 1, 1982 and June 30, 1983. Of the total, 78 are reports on master's studies or theses, 37 are doctoral dissertations, and 39 are funded or unfunded staff studies. In addition to the summaries of completed work, there is a section listing 173 studies or projects in progress. A total of 34 institutions in 30 states are represented in the document. In addition, 15 institutions indicated no research and development activities during 1982-1983.

In each section the entries are listed alphabetically by state, and within states they are listed alphabetically by author name. A subject index and an author index are included at the end of the document. In addition, lists of past national editors and ERIC accession numbers for all previous editions of this document are provided. The reader should note that entries for this publication are submitted in camera-ready form. Responsibility for proofreading and accuracy belongs to the individual contributor.

This publication is an activity of the Research Committee of the Agricultural Education Division, American Vocational Association (AVA). It is funded by AVA monies and is provided at no charge to each head teacher educator and each head state supervisor of agricultural education. Additional copies are provided on an advance-order basis at $6.00 each. A limited number of copies are available for purchase at that price from the address on the inside cover page.

The editor acknowledges and expresses gratitude to all of those individuals who assisted with this effort and who contributed items included in the document. Special thanks are due to Dr. Joe W. Kotrlik, past editor for his suggestions and guidance; to Dr. John R. Crunkilton, Program Area Leader, Agricultural Education, Virginia Tech for his support of this activity; and to Mrs. Doris Smith, Secretary, Agricultural Education, for her assistance in typing parts of the document.

William G. Camp

William G. Camp
Editor

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SUMMARIES OF RESEARCH AND DEVELOPMENT ACTIVITIES IN
AGRICULTURAL EDUCATION IN THE UNITED STATES
1982-1983

ARIZONA

Ellsworth, B. W. (1983). Non-traditional community college approaches to the educational needs in agriculture. Masters research paper, University of Arizona, Tucson.

The purpose of this study was to identify the non-traditional activities and topics used by community colleges in the western states and also to identify the educational needs of agricultural producers in Graham County, Arizona. A random sample of community colleges in the eleven western states and of the agricultural producers in Graham County were surveyed. Two separate, mailed questionnaires were used with a variety of follow-up methods. The community colleges were the principal organizers and financial supporters of short courses, guest lectures and workshop/seminars used to meet non-traditional needs in agriculture. A wide variety (66) agricultural subjects were identified as being addressed with non-traditional methods. Non-credit night classes reached the non-traditional student at more colleges than other methods. The agricultural producers rated as most profitable those activities which include active participation, such as field days, demonstration plots and tours.

Hanson, L. W. (1983). Development of an instrument for identifying employee personal qualities needed in agricultural occupations. Master of Science thesis, University of Arizona, Tucson.

The purpose of this study was to develop an instrument for identifying, in specific behavioral terms, those employee personal qualities considered by agricultural employers as being conducive to occupational success. Twenty-two agricultural employers from Pima County were interviewed by the researcher. They were asked to describe the qualities they like to see in their employees. Open-ended, as well as follow-up questions were used to elicit the desired information. The researcher found that it was possible to identify specific behavior patterns indicated by employers as being conducive to occupational success. Some difficulty was encountered in eliciting data in a form consistent with the purpose of the study. Initially, the researcher collected 200 individual statements. Elimination of duplicate, non-measurable and similar behavior statements reduced the final list to 63 individual statements. It was these 63 statements that were included in the instrument.

Jacobs, C. O. (1983). An evaluation of air charge for a welding fumes exhaust system. Staff study, University of Arizona, Tucson.

The problem investigated was to evaluate the feasibility of introducing unheated outside air into the airstream of a cross-flow welding exhaust system to reduce heating energy costs of a school welding laboratory. An air charge manifold and diffuser ducts were attached to a free standing electric arc welding table. Outside air was introduced into the manifold to complement the exhausted air. The findings indicated that when properly designed the amount of outside unheated air which may be introduced by air charge could reduce cost of heating make-up air by 48 percent or more. The charge air complemented the exhaust system by increasing the capture velocity of the welding boot, especially at the surface and four inches above the surface of the welding table. In addition, the amount of iron oxide inhalation by the student welder was reduced 23 percent compared to operating only the exhausted system. At the maximum air charge rate the amount of area fumes increased 34 percent, suggesting that the design could be improved to attain maximum capture air benefits. However, the level of contamination was still 92 percent less than the TLV level of $5mg/m^3$ established by OSHA/ACGIH. Implications of the study indicate that both environmental and economic considerations warrant the use of air charge as a design criteria for welding fumes exhaust systems.

Jacobs, C. O. and J. V. Mulcahy (1983). An analysis of skills required of agricultural mechanics at retail farm machinery dealerships. Agricultural Experiment Station, Research Report 283, University of Arizona, Tucson.

The purpose of the study was to determine the type and frequency of service/repair operations performed by Arizona Agricultural Machinery Company for the period January 1, 1981 to June 30, 1981. It was determined that the modern retail agricultural machinery dealership in central Arizona requires service personnel with a broad range of mechanical skills. However, two-thirds of the service records that were utilized for the six-month period identified jobs involving power train, electrical, hydraulic, cooling and air conditioning. Of the jobs performed in the field, approximately one-half involved air conditioning and hydraulics. Two-thirds of all service orders involved work conducted on tractors. The data indicate that curricula for specialized programs in agricultural power and machinery at the secondary and postsecondary levels should

place increased emphasis upon those competencies which are demanded of business and industry in this important component of agriculture.

Schimpp, S. A. (1983). Readabilities of vocational agriculture student reference units of varying format styles. Master of Science thesis, University of Arizona, Tucson.

The purposes of this study were to (1) determine the preferences of vocational agriculture students as regards selected format style factors for a student reference unit on Plant Diseases; and (2) determine whether the readability of this unit could be improved through manipulation of these selected format style factors. Three basic sample format styles were tested by the study: (1) Pica type/single column per page; (2) Elite type/single column per page; and (3) Elite double column per page. In addition, student preferences as to the use or non-use of marginal outline symbols was determined through the use of supplemental loose-leaf sample format sheets. A total of 276 freshmen and sophomore students from nine Arizona vocational agriculture programs participated in the study. Approximately 53 percent of the surveyed students liked the Pica type/single column format best, with the other two formats being preferred by approximately 25 percent of the students surveyed. Students of low, medium and high reading ability level subgroups all tended within themselves to hold to an overall 2:1:1 trend of preference for the Pica/single column, Elite/double column and Elite/single column formats, respectively. Approximately two out of every three students surveyed preferred the use of traditional outline symbols in page margins to their non use. All three of the sample units tested were statistically determined to be of more or less equal readability.

Zurbrick, P. R. (1983). Scope of supervised occupational experience. Staff report, University of Arizona, Tucson.

The purpose of this staff study was to determine the status of supervised occupational experience programs conducted by vocational agriculture students at the secondary level in Arizona. A stratified, random sample of 20 vocational agriculture programs representing approximately 40 percent of the total programs were included in the study. Students who had completed one year of vocational agriculture were surveyed to determine the nature and scope of each student's supervised occupational experience. An SOE index formula was developed and used in quantifying SOE experience. It was determined that SOE standards which increase with students' experience in vocational agriculture are realistic in terms of actual practices. Standards for "ownership/production" type SOE programs are not on a par with those used for "placement" experiences. The percentage of students participating in SOE programs is not influenced by grade levels, but rather remains essentially the same.

ARKANSAS

Hayles, J.A. (1983). Can vocational agriculture teaching and farming be combined: staff study. Arkansas State University, Jonesboro

In order to get to some of the questions on this subject, this study was an attempt to determine the attitudes and opinions of agriculture teachers and school administrators in the state of Arkansas. Sampling was systematic and executed by mailing questionnaires, in repeating sequence, to superintendent, principals, and agriculture teachers until each of the 251 schools on the list, progressing down the list alphabetically, was included. Responses of the three groups were tabulated separately and chi-square computations were made to determine statistically significant differences of opinion between groups. Major findings concluded that a teacher teaching and farming within the same area would be more likely to stay within the profession as well as the community. The teacher who operates a farming operation would be more knowledgeable of the modern farm technology and use more "hands on" experience for his students. The agriculture teachers and school administrators agreed that their teaching obligations as a profession, came first over any other commitments to sideline income. Recommendations include that there be a more complete line of communication between the vocational agriculture teachers and administration on the question of farming as the sideline, as well as some form of agreement. Most of the statistically significant differences in opinions were not the result of opposing viewpoints by the group, but resulted from differences in the strength of their support as a group.

CONNECTICUT

Mannebach, A.J. (1983). A study of adult education programs in agriculture. Staff study, The University of Connecticut, Storrs.

The study was conducted to collect data about the adult education program in agriculture which could be used to make recommendations for future program planning in Connecticut. The primary methods used were a mailed survey to a random sample of 585 agricultural firms and 280 Farm Bureau members, personal interviews with all eighteen vocational agriculture department heads, and document analysis. Major finding were that 39 percent of the vocational agriculture centers had adult education courses being offered at the time of the study, that the lack of staff, time, funds and administrative support were the chief reasons why adult education programs were not offered and that a need for adult education programs in agriculture did exist. In addition it was found that approximately 11,700 full and part-time farm and agricultural firm employees could benefit from adult education programs while it was estimated that about 10 percent of the full time employees and 13 percent of the part-time employees would attend adult education offerings. It was recommended that every vocational agriculture center in the state offer an adult education program.

FLORIDA

Arrington, L. R. and Price, W. H. (1983). Relationship of vocational agriculture student satisfaction to selected student, school and program variables. University of Florida, Gainesville.

The study was designed to describe selected demographic characteristics of senior vocational agriculture students in Florida high schools. It also appraised participant satisfaction with the competencies developed as a result of participating in the vocational agriculture program and identified student, school and program variables related to program participant satisfaction. Respondents were asked to rate statements about their experience in vocational agriculture/agribusiness and FFA, their teachers, and the scope and function of the program. Seniors indicated a high degree of satisfaction with the experiences they received in vocational agriculture. Two-thirds of the students had been involved in a supervised occupational experience program while in high school and over 90% had been a member of the FFA. Three categories of satisfaction factors were identified.

Cheek, J. G. and McGhee, M. B. (1983) Competency test items for applied principles of agribusiness and natural resources occupations. Experiment station study. University of Florida, Gainesville.

This study was to develop and field test written criterion-referenced tests for each of six components of Applied Principles of Agribusiness and Natural Resources Occupations (10th grade level). The six component areas used as the scope of this project were: agricultural production, agricultural mechanics, forestry, ornamental horticulture, agricultural resources, and the common core component. For each component, a list of competencies was developed and compiled and a written criterion-referenced test was developed for each individual component of Applied Principles of Agribusiness and Natural Resources Occupations. The separate instruments were then field tested to determine validity, reliability, item difficulty, item discrimination, and point biseral correlation for each test item.

Maday, J. A. (1983). Develop and field test written and performance student achievement measures for cattle rancher. Division of Vocational Education, Florida Department of Education. University of Florida, Gainesville.

The purpose of this study was to develop and field test written and performance achievement measures for the occupational area of Cattle Rancher. The content of these tests was based on a list of 110 Occupational Proficiency Performance Standards provided by the Florida Department of Education. The project staff contracted with a group of vocational agriculture teachers who served as consultants on the project. These teachers wrote multiple choice test items and helped to develop performance tasks. Industry representatives were contacted to verify technical accuracy of the items. The resultant written and performance tests were field tested over a two month period in Florida high schools. Field test results were subjected to statistical analysis to determine validity and reliability of the items. The results of the project consist of two written tests of 129 questions each and two performance tests of four jobs each. Also included are an examiners guide, student instruction booklet, evaluation sheets for the performance tests and a cost analysis of materials needed.

McGhee, M. B. and Cheek, J. G. (1983) Competency test items for fundamentals of agribusiness and natural resources. Experiment station study. University of Florida, Gainesville.

This study was to develop and field test criterion-referenced tests for the Fundamentals of Agribusiness and Natural Resources Occupations program (9th grade level). Instructional areas, in which a test was developed for each, were animal science, agricultural mechanics, leadership, plant science, agribusiness management, and soil science. A list of competencies was developed and compiled for each of the instructional areas of Fundamentals of Agribusiness and Natural Resources Occupations program. A criterion-referenced test was then developed for each of the six areas and field tested to determine instrument validity and reliability, item difficulty, item discrimination, and point-biseral correlation for each item.

McGhee, M. B. and J. G. Cheek (1983). Assessment of competencies possessed by students enrolled in the fundamentals of agribusiness and natural resources occupations program. Department of Agricultural and Extension Education, University of Florida, Gainesville.

This study sought to determine the level of mastery of 2250 students enrolled in the Fundamentals of Agriculture programs on the Fundamentals of Agribusiness Occupations Test (FAOAT) and to compare mastery in terms of selected variables. The sixty-item FAOAT was developed from items banks developed and validated in previous work by the researchers. The test was comprised of items designed to measure competencies in animal science, agribusiness management, plant science, soil science, agricultural mechanics and leadership. Fifty-four teachers were also surveyed to determine whether or not they were teaching the 76 competencies identified in the State curriculum guide for "Fundamentals". Students performed best on FAOAT questions related to agribusiness management and plant science and the poorest in agricultural mechanics. Mastery was higher for students who were members of the FFA and/or were involved in supervised occupational experience programs. Almost seventy percent of the 76 competencies were taught by 50 percent or more of the teachers and all of the leadership competencies were taught by 75 percent or more of the teachers.

McGhee, M. B. Knowledge and awareness of Florida vocational agriculture teachers concerning low energy technology activities of the Institute of Food and Agricultural Sciences. Department of Agricultural and Extension Education, University of Florida, Gainesville.

The purpose of this study was to determine the awareness and knowledge level of vo-ag teachers regarding low energy technology activities and to compare these levels based upon their subject matter expertise and teaching responsibility. A sample of 289 teachers completed a closed form questionnaire and the data revealed that teachers in all areas of subject matter expertise were quite unaware of the various low energy technology activities and hence are unable to demonstrate and/or explain the principles of such practices to their students. Therefore, recommendations included the development of a long range program of inservice education activities for teachers.

Summerhill, W. R.; Taylor, C. L.; Cole, M. F. & Stucker, J. A. (1983). Validity of advisory group perceptions of the level of adoption of selected agricultural practices. University of Florida, Gainesville.

This study examined the extent to which lay advisory group perceptions of the situational status of selected audiences are in agreement with the status of those audiences as indicated through direct survey. The levels of adoption of recommended practices by beef producers in a 5-county area of Florida is the area of focus. Practice adoption levels as perceived by extension beef advisory committees are contrasted with the levels indicated through a scientifically designed survey of beef producers. Data indicate that advisory committee estimates of practices used do provide at least a "ball park" indication of extent of utilization of selected practices. Data also suggest a possible tendency by both advisory committees and extension agents to underestimate the extent of practice adoption, with extension agents being the most conservative. The data supports the notion of advisory committee input as a means of achieving greater accuracy than through agent estimates alone.

Waltz, F. C., Arrington, L. R., Cheek, J. G., & Beeman, C. E. (1982) Identification of recruitment barriers to vocational training programs as perceived by students, teachers, counselors, and administrators in selected Florida schools, phase II. Florida Department of Education, Division of Vocational Education. University of Florida, Gainesville.

This study was designed to identify strategies used to overcome student recruitment and retention barriers to vocational training programs and to develop models to implement recruitment/retention strategies. A random sample of postsecondary vocational school administrators was selected from a national listing of postsecondary vocational schools. Each administrator was mailed a copy of the "Vocational Administrator Survey" developed specifically to identify recruitment and retention strategies. A 64% response rate was achieved after two follow-ups. Major findings were that 45 strategies have been used successfully as perceived by administrators who responded to the survey instrument. Also the correlation between degree of utilization and degree of success for each strategy was positive in all cases and administrators do not always use recruitment strategies that are highly successful. Recommendations include developing a manual on student retention and a plan for student recruitment. Further research should be conducted to determine the factors that influence students to enroll in postsecondary vocational training and the factors that contribute to their continued enrollment.

IDAHO

Crawford, T.L. (1983). Selected Factors Which Indicate Vo Ag/FFA Program Quality in Idaho as Perceived by Idaho Vo Ag Teachers and Principals. Non-thesis research paper. University of Idaho, Moscow.

This study was designed to determine factors that indicate a quality high school vo-ag program, as perceived by Idaho vocational agriculture teachers and their administrating principals. The population included 73 Idaho vo-ag instructors and 74 principals who administer these vo-ag programs. Each teacher and principal was mailed a questionnaire containing 38 listed factors indicating vo-ag program quality while the last part of the questionnaire collected demographic data. A 73% teacher response and a 58.2% principal response was achieved. Major findings were that vo-ag teachers valued the opinion of parents as the highest indicator of program quality while the principals valued professional pride of the vo-ag teacher as the highest. The quality indicator valued lowest by both the vo-ag teachers and principals was the amount of school time used for FFA activities. The largest variation of opinion within both groups was for the quality indicators, supplemental pay for FFA activities and length of vo-ag teacher contracts.

Fedale, S.V. (1983). Developing Interactive Microcomputer/Video Projects for Extension. Special topics, University of Idaho, Moscow.

This study focused on the new technology of interactive microcomputer/video programming. It takes a brief look at the concept of "interactivity" and some different types of interactivity. The focus then shifts to information delivery within the Cooperative Extension Service in Idaho and some problems with traditional information delivery methods. Ways in which interactive microcomputer/video programs might solve some of the problems with traditional Extension information delivery are offered and some guidelines for creating an interactive video program are presented with the Extension Service professional in mind.

ILLINOIS

Hemp, P.E. and Courson, R.L. (1983). Illinois Core Curriculum in Agriculture - Phase IV. Staff study, Illinois State Board of Education. University of Illinois, Champaign-Urbana.

This phase of a five-year continuation project involved the development and production of core curriculum materials for junior or third-year students enrolled in vocational agriculture programs in rural and urban secondary schools. Twenty-one instructional packets for rural vocational agriculture programs and twenty-one packets for metropolitan programs were developed and printed. In addition, during this phase, 29 teacher workshops were conducted to disseminate Core II materials developed in 1981-82.

Identification of units and problem areas to include in the core curriculum was a joint effort of the project staff and two advisory committees based on employment data and occupational trends analyzed during Phase I of the project. A free set of the core materials consisting of approximately 850 pages was available to all Illinois vocational agriculture teachers attending a dissemination workshop.

Savko, Teresa (1983). The Use of Team Competition in the Vocational Classroom. Masters study, Southern Illinois University, Carbondale.

The information obtained from students was gathered from an identical pretest/posttest instrument which consisted of 5 cognitive and 6 affective statements. The sample consisted of 116 students from 6 Illinois high schools which were enrolled in established horticulture programs. The instrument was distributed and data tabulated by the researcher. The use of team competition in the vocational classroom was to be as effective in stimulating learning as the use of individualized student practice when combined with the lecture/demonstration teaching method. The purpose of this study was to provide information about viable teaching methods for use in the vocational classroom and to provide information when using direct team competition in relation to a student's cognitive, affective, and psychomotor learning. Results determined that there was no significant difference in the cognitive, affective, and psychomotor learning between students instructed by lecture/demonstration/teach competition and the lecture/demonstration/individualized student practice teaching method in the vocational classroom.

Vasquez, Manuel Alberto (1983). Instructional Materials for Agricultural Education Leadership Training of Honduran Campesinos. Masters of Science Research Report, Southern Illinois University, Carbondale.

The purpose of this research was to develop instructional and evaluative materials which can be used by facilitators in leadership training of community members in rural Honduras. A short course was recommended for the delivering of eleven units of instruction which contain leadership education material. Preliminary and conclusive data will have been gathered through an instrument design which will assess the observed changes in agricultural community indicators. A ten-day class period will have been necessary to reinforce leadership skills and knowledge of participants, to promote rural community development, and to organize small farmer groups.

Zippe, Larry (1983). Agriculture Computer Training. Research Paper, Southern Illinois University, Carbondale.

The study was conducted to identify the quantity and quality of computer training needed for central high school agriculture students. The focus of the study was on the farmers and agribusinesspersons in the central high school district that were presently utilizing microcomputers. Farm and agribusinesspersons were identified in the school district as being users of microcomputers to determine the extent microcomputers should be used in the central high school agriculture program. The study was limited to one high school district. The agriculture microcomputer operators felt that the high school agriculture students need to know how to use the microcomputer. Central high school agriculture students should use the microcomputer in learning agriculture knowledge and skills.

INDIANA

Hamilton, W. H. (1983). Tasks performed by job incumbents in 25 agricultural mechanics job titles. Staff Study, Purdue University, West Lafayette, Indiana.

This study was conducted to identify the tasks completed by job incumbents in agricultural mechanics job titles in Indiana. A list of task titles and tools was developed by a computerized literature search. Job incumbents were interviewed and a questionnaire was developed and mailed to members of the Indiana Machinery Dealers Association, who had agreed to have their mechanics complete the survey instruments. The survey covered 524 tasks in 25 job titles and 392 items of tools and equipment used by these job titles. Useable forms were returned by 206 mechanics representing 53 Indiana dealerships. Forty-two percent of the individuals responding indicated more than one job title. A number of task analyses (158 out of 524) and performance guides were completed during the study.

Hamilton, W. H. (1983). Farm machinery set-up mechanics, a V-TECS catalog. Staff Study, Purdue University, West Lafayette, Indiana.

Development of a V-TECS Catalog in the agricultural mechanics domain.

Two job titles were included in the catalog research; farm machinery set-up mechanic and delivery man. The population was the set-up job titles in member dealerships of the Indiana Farm Machinery Dealers Association. Forty men from 28 dealerships completed useable forms from the sample of 54 drawn for the research.

A computerized search of the literature was completed and a draft instrument was developed and field tested. A writing team was formed and trained for preparing performance objectives and performance guides for the 158 tasks in the catalog.

Performance objectives, performance guides and where appropriate, performance checklists, were developed and a field review catalog was printed and presented to a field review committee of knowledgeable people. The final catalog was completed after the field review recommendations were studied.

bin Yahya, I. (1983). Opinions of agriculture teacher educators relating to agricultural and rural improvement in late-developing countries. Master's thesis. Purdue University, West Lafayette.

This census was designed to assess the perceptions of agriculture educators relative to international agriculture programs. A mailed researcher-designed survey instrument was employed in data collection. Instrument validation was pursued using educators with international experience. A response rate of 71.5 percent was attained following three each of follow-ups and reminders. The instrument contained two 5-point Likert-type scales each with 91 items. Educators were asked to indicate a degree of agreement to each item on the first scale and how certain they were of each response on the second. Date from both scales were transformed to 13-point scales. In general there was no significant difference in the perceptions of educators with overseas experiences in agriculture and those with no such experience or interest for involvement. However, experienced and inexperienced but interested educators were more certain of their responses than educators not desiring international experience.

Anderson, D.C. (1983). Overview and Analysis of Programs of Agriculture in Higher Education in Costa Rica. Doctor of Philosophy Dissertation, Iowa State University, Ames.

The purpose of this study was two-fold: (1) to describe the programs of study in agriculture operating at the various institutions of higher education in Costa Rica; and (2) describe and analyze in detail the three agricultural programs offered by the University of Costa Rica specifically. The data were collected by the author in Costa Rica. For the general overview of all agricultural academic programs, information was gathered through personal interviews and from existing reports, records, and publications. For the in-depth analysis of programs at the University of Costa Rica (UCR), the author conducted a follow-up study of recent licenciatura degree graduates (1979-81), utilizing personal interviews following a fixed interview schedule. A representative sample of 71 graduates from all three degree programs were interviewed. Secondary sources also provided additional information. Major findings included: (1) a detailed description of the 15 individual degree programs in agriculture offered through the four public institutions of higher education in Costa Rica; (2) the various attitudes and perceptions of program graduates from the three major agricultural curriculum specialities of the UCR Facultad de Agronomia concerning aspects of their professional preparation; and (3) a description and discussion of the current employment status of graduates, including their primary functions and responsibilities. Throughout, the study presents the responses of graduates to open-ended questions soliciting their suggestions and comments.

Fletcher, G.W. (1983). Employers' Perceptions of Agribusiness Experience for Vocational Agriculture Students in Iowa. Master of Science Thesis, Iowa State University, Ames.

The ultimate purpose of this study was to determine the benefits derived from agribusiness supervised occupational experience (SOE) and to identify factors important in planning and/or conducting vocational agriculture (vo-ag) students' agribusiness employment experiences as perceived by employers of vo-ag students. Benefits and factors used to measure employers' perceptions of the program were compiled from a review of related literature and deemed as appropriate for workers specifically engaged in non-farm agribusiness occupations. A random selection process provided a sample group of 56 agribusiness employers. A questionnaire designed with a self-addressed postage paid stampage on the

back was used to gather the data. Employers rated 29 or 35 ability items as being an average to great contribution of the program to student ability development. Fourteen of 16 factors were rated as average to utmost importance in planning and conducting vo-ag students employment experiences. Agribusinesses were primarily involved in sales and services and the majority employed 10 or less full-time people. The businesses had employed only one or two vo-ag students on a part-time basis. Employers perceived planned employment in an agribusiness as a desirable way for vo-ag students to learn and as a desirable arrangement for their firms.

Johnson, S.D. (1983). Microcomputer as a Decision-Making Aid in Teaching Farm Management. Master of Science Thesis, Iowa State University, Ames.

The purpose of this study was to evaluate the effectiveness of the microcomputer when used as an aid for decision-making in an introductory farm management course. The study included a post-test only control group design with the population consisting of Winter Farm Operation Program students enrolled in an introductory farm management course at Iowa State University. All students spent a minimum of one hour viewing instructional slide-tape sets and using the microcomputer, software, and printer. The treatment consisted of one laboratory section using the microcomputer and a program developed to aid in calculating the break-even analysis. The other laboratory section completed the same assignment using more traditional methods, with calculations made with the aid of pocket calculators. This served as the only difference between the two laboratory sections. Students whose occupational plans were to farm full-time and also those with higher grade point averages, scored higher on questions related to the content of the laboratory assignment. The attitudes of the students toward farm management principles taught were positive. The treatment did not significantly affect the students' knowledge nor attitude concepts toward farm management principles; therefore, other factors should be considered in deciding whether the microcomputer should be used as a decision-making aid for teaching farm management.

Memon, R.A. (1983). Administrative Management and Perceived Importance of Agriculture Work Experience Programs at Two-Year Post-Secondary Institutions of Iowa. Doctor of Philosophy Dissertation, Iowa State University, Ames.

The study was designed to analyze student, staff, and employer perceptions about the value of two-year post-secondary agriculture

work experience programs in Iowa. It also aimed at analyzing administrator perceptions about selected aspects of administrative management of these programs. A stratified random sample was drawn comprising 183 respondents. These respondents were asked to rate 40 items of importance of agricultural work experience education on a scale of 1 to 9. For the administrative management portion of the study, all 15 agriculture program administrators at Iowa area colleges were personally interviewed with the help of a questionnaire. Analysis of perceptions revealed that students, employers, as well as faculty members considered agriculture work experience highly important by assigning ratings which averaged well above the midpoint on a nine-point scale. Significant differences in administrator perceptions were found on 9 out of 12 teacher-coordinator duties in terms of their current and desired emphasis and on 10 out of 20 management activities in terms of their level of importance and level of implementation.

Nelson, A.B. (1983). An Experimental Evaluation of a Resource Packet on Delegation for FFA Officer Training. Doctor of Philosophy Dissertation, Iowa State University, Ames.

A resource packet for FFA officer training was developed to help officers operate the local FFA chapter as a member-centered organization and to train them in methods of delegation. The purpose of this study was to evaluate the effectiveness of the resource packet. All FFA chapters in Iowa were the population for the study. Sixty randomly selected chapters were assigned to one of three treatment groups--packet only, inservice, or control. The chapter advisors were requested to conduct a six-hour training workshop on member participation and officer delegation for the FFA officers during the summer of 1982. The control group did not use the resource packet. Sophomore FFA members, chapter officers, and the advisors completed questionnaires in January, 1983. Based upon their responses, scores for chapter productivity, drive, and cohesiveness; overall chapter achievement; and officers' and advisor's tendency to delegate were calculated for each chapter. As the number of FFA members increased, chapter productivity, chapter drive, and overall chapter achievement increased. The advisor's rating of chapter activeness and the officers' tendency to delegate were directly related to each measure of chapter achievement. The advisor's tendency to delegate was also related to chapter drive. Chapters in the three treatment groups were not significantly different on any of the chapter achievement measures. Also, there were no significant differences among the three treatment groups on the officers' tendency to delegate; however, advisors in the control group were significantly lower in their tendency to delegate than were

advisors in the packet only and the inservice groups. It was determined that while the packet did not significantly affect FFA chapter achievement, the advisors' tendency to delegate was affected by the use of the packet. It was concluded that further study was needed to evaluate the effectiveness of the packet.

Omer, M.H. (1983). Competencies in Dairy Production Needed by Dairy Farmers of Kuku Cooperative Dairy Society in Sudan. Master of Science Thesis, Iowa State University, Ames.

The purpose of this study was to determine the competencies in dairy production needed and possessed by the dairy farmers at Kuku Cooperative Dairy Science (KCDS) in Sudan. A list of 46 competencies in dairy production was developed using the experiences of the researcher and the literature. Personal interviews were conducted with a sample of 36 dairy farmers. On the five-point scale, 42 of the 46 competencies were confirmed by the 36 dairy farmers to be important. As a group they rated these competencies 2.0 or more, a rating of "some" or above in importance. These findings implied a need for training programs designed to meet the needs of dairy farmers in the KCDS in Sudan.

Pilgram, D.A. (1983). Students' Perceptions of Agribusiness Supervised Occupational Experience Programs in Iowa. Master of Science Thesis, Iowa State University, Ames.

The purpose of this study was to identify the characteristics of high school students participating in non-farm agribusiness placement SOE programs and to use these characteristics in testing for differences in the contribution of agribusiness placement SOE to occupational ability development and the importance of selected factors in planning and/or conducting agribusiness placement SOE programs. An inventory of 35 occupational abilities appropriate for workers in agribusiness occupations was derived from a review of related literature. An inventory of 16 factors considered important in planning and/or conducting agribusiness placement SOE programs was also derived from a literature review. These inventories wer provided in questionniare form to a random sample of 150 Iowa high school vocational agriculture students participating in agribusiness placement SOE programs. Reliability coefficients for the two inventories permitted the use of grand means in difference testing. Major findings included: 1) a profile of the "statistically average" agribusiness placement SOE participant, 2) rankings of individual items comprising the occupational ability and planning/conducting factor inventories by sample and subsamples, and 3) differences observed in inventory grand means when students were classified by their demographic characteristics.

Slocombe, J.W. (1983). Experimental Evaluation of an Instructional Packet on Supervised Occupational Experience Placement Programs for Vocational Agriculture. Doctor of Philosophy Dissertation, Iowa State University, Ames.

The purpose of this study was to assess the effectiveness of an instructional packet on supervised occupational experience placement programs for vocational agriculture based on: 1) student knowledge of SOE placement programs, 2) student attitude toward SOE placement programs, and 3) student SOE placement program planning. A posttest only control group design was used. The experimental group consisted of 15 vocational agriculture teachers and their sophomore classes; the control group consisted of 14 vocational agriculture teachers and their sophomore classes. The experimental treatment consisted of an instructional packet designed for use by teachers in helping students select and plan their SOE placement programs. Control group teachers were provided an outline of the instructional unit and taught their unit using ordinary materials and methods. Dependent variables were assessd by: 1) SOE placement knowledge inventory, 2) SOE placement program attitude inventory, and 3) SOE placement program planning inventory. The findings of the study were: 1) Experimental group teachers spent significantly more days teaching the unit (=.01). 2) No significant difference existed between treatment groups for SOE placement program knowledge scores, SOE placement program attitude scores, nor SOE placement program planning scores. 3) Significantly higher knowledge scores were achieved by: students living on a farm than by those living in a city or town (=.01), students with production SOE programs than those with on-farm placement SOE programs (=.01), students with occupational aspirations in production agriculture than those undecided about their occupational plans (=.05), students that planned to continue their formal education than by those who did not (=.01). 4) Students desiring employment experience in production agriculture possessed a more positive attitude toward SOE placement programs than students interested in agricultural processing (=.01). 5) Students with off-farm SOE programs achieved significantly higher program planning scores than students with no SOE program (=.01).

Burnett, M.F. (1983). Instructional materials for the basic program of vocational agriculture in Louisiana. Funded by the Louisiana State Department of Education. Louisiana State University, Baton Rouge.

This project was conducted to develop curriculum materials for Vocational Agriculture I and II in Louisiana. A committee of teachers was organized to offer input as to the format used and general subject matter areas to include in this two-year basic program of instruction. A complete outline of subject matter areas and lessons was developed and used in completing the final product. The format was in the form of a teaching plan outline. Curriculum included the areas of animal science, plant science, soil science, agricultural mechanics, orientation to vocational agriculture, career information, agricultural leadership, environmental protection, and energy conservation. A time allotment for the local option was also included in the plan. Emphases in the program were in agricultural sciences, leadership, and exploratory work experiences in agricultural production and agribusiness occupations.

Burnett, M.F. and bin Yahya, I. (1983). Actual and desired role perceptions of teachers of vocational agriculture. Funded by Louisiana State Department of Education. Staff study. Louisiana State University, Baton Rouge.

This staff study was conducted to determine the extent to which there are discrepancies in the actual and desired role perceptions of Vo-Ag teachers. A mailed researcher-designed closed-form survey instrument was used to collect data from 100 randomly selected Vo-Ag teachers in Louisiana. Instrument validation was pursued using a panel of experts. After three follow-ups and three reminders a 97 percent response rate was achieved. Teachers were asked to indicate how desirable each of 21 roles and 19 external factors was to their success based on a 7-point Likert-type scale, which was later transformed to a 13-point scale. Larger discrepancies were found for the more non-traditional roles such as curriculum designer, researcher, and consultant than the more traditional such as teacher and FFA chapter advisor. Teachers also perceived administrative support, attitude of Vo-Ag students, availability of funds, and parental support as the leading factors influencing their role and overall success.

Kotrlik, J.W. and J.S. Garland (1982). An assessment of the need for school-community food preservation centers in Louisiana. Staff study. Louisiana State University, Baton Rouge.

A questionnaire survey was conducted to assess the status of the Louisiana School-Community Food Preservation Program (LSCFP). Data were collected from vocational agriculture/agribusiness teachers, vocational education supervisors, meat merchandisers, LSCFP patrons, and former students who had participated in the program. The objectives were to determine the educational effectiveness of the LSCFP, the social and economic benefits of the program, and the attitudes toward the program. Major conclusions were: (1) the program was lacking in effectiveness

because generally the time spent in instruction, the number of students receiving instruction, and the number of students gaining employment in the food processing industry were less than satisfactory; (2) former students, patrons, communities, and the state as a whole have gained significant benefits as a result of the program; (3) teachers, supervisors, former students and patrons held favorable attitudes toward the program. Teachers, supervisors and students agreed that food processing instruction should be included in every high school vocational agriculture/agribusiness program.

Moore, G.E. Factors related to choosing a university for doctoral study in agricultural education. Staff study. Louisiana State University, Baton Rouge.

The study was designed to identify factors which were important to doctoral students in selecting a university to attend for doctoral research. The frame for the study were doctoral students listed in the 1981-82 AATEA employment survey. Thirty-six of the 43 students in the frame responded (84%). An instrument was developed liscing over 30 possible reasons for selecting a university for graduate student. Using a 1-5 Likert type scale the respondents were asked to rate each item. The respondents were also asked to select the three most important items from the list. The following were the major reasons given by the students: financial assistance, reputation of the faculty university, and advice of someone I respect.

MARYLAND

Anderson, G.C. (1983). Status of Supervised Occupational Experience Projects in Vocational Horticulture Programs in the Eastern Region of the United States. M.S. Thesis, University of Maryland, College Park.

The purpose of this study was to determine the status of SOEP's in vocational horticulture classes in the Eastern Region of the U.S. The study included demographic data concerning the responding teachers and their students and programs; the problems/barriers as perceived by the teachers in implementing SOEP's; and data concerning the characteristics of the SOEP's being implemented during the 1982-83 school year. The study consisted of a questionnaire mailed to all horticulture instructors with classes lasting two or more consecutive periods per day in the Eastern Region of the U.S. Chi-square tests for significance were done on demographic items to determine if there were significant differences between teachers with SOEP's and teachers without SOEP's. A Spearman-rho correlation test was done on the problems/barriers ratings to determine if there was a correlation between the two groups of teachers--those with and without SOEP's. A total of 120 teachers responded to the survey. This was an overall return of 65.2%. Ten northeastern states were included in the survey. The results of the study indicated that 70% of the teachers surveyed do have SOEP's in their programs. It was found that teachers with more students per class were significantly more likely to have SOEP's than teachers with fewer students per class. Teachers with more students from rural and small town areas were significantly more likely to have SOEP's. There was no significant difference between the two groups in other demographic data collected. The list of problems/barriers in implementing SOEP's developed by the researcher were all considered viable. The highest rated by all respondents was "long distance travel for students." There was no significant correlation between teachers with and without SOEP's and their perceptions of problems/barriers in SOE implementation. All but two of the thirteen items listed were rated differently by the two groups. All project types reviewed in literature and listed on the instrument were used by the respondents. Business placement was the type used most frequently. Among those responding, considerable variation exists in the extent of SOEP inclusion and individual characteristics of the SOEP's differ considerably in scope.

MICHIGAN

Karelse, R., Olson, C., et al (1983). Task based curriculum for production agriculture. Funded by Michigan Department of Education. Michigan State University, East Lansing, Michigan.

Curriculum guides in vocational production agriculture were written for each of five areas: crops, soils, livestock, farm business management, and farm mechanics. The format is duty, task, achievement indicator and criteria. In addition each guide includes a suggested tool and equipment list (listed by duty), a student achievement record, and the common duty areas of performing leadership skills and using employability skills. References used to develop the duties and tasks included VTECS catalogs, performance objective lists, other curriculum guides, industry materials, and teacher expertise. The writing team for each curriculum guide was composed of two teachers. The teachers were selected on basis of their expertise in the subject area, writing ability, and recognition among their peers as offering quality programs.

Mangroo, S.D. (1983). A plan for teaching agriculture at the upper secondary level in Trinidad and Tobago. Master of Science research paper, Michigan State University, East Lansing.

The objective of this paper was to develop a plan for teaching agricultural education in the senior comprehensive schools of Trinidad and Tobago. Chapter one gives an overview of the educational system in Trinidad and Tobago, presents the problem, the objectives of the study, the need for the study, the procedure that was followed, and the limitations. The second chapter contains a review of agricultural education in Trinidad and Tobago. The government policies in education in the Draft Plan for Education 1968-1983 were examined. The agricultural education syllabus was explained. A white paper on agriculture, dated December 1978 was quoted to provide the objectives of the agricultural policy. Finally, one section contained what agricultural educators think that agricultural education ought to be. Chapters three to six review agricultural education in Botswana, Israel, India and Taiwan. Chapter seven consists of conclusions formed from the reviews of the literature on each country, and makes recommendations fom teaching agricultural education in senior comprehensive schools in Trinidad and Tobago.

Shahrokh, D. (1983). A study of the agricultural competencies of senior vocational agriculture students in Michigan based on their supervised occupational experience programs. Doctoral dissertation, Michigan State University, East Lansing.

The study was designed to determine which of three types of supervised occupational experience programs in Michigan were perceived to be most effective: those with a focus on home farm production, farm or agri-business placement, or school land laboratories. Place of student residence was one of several varibles.

A systematic random sample was drawn from a list of all Michigan public schools which offered vocational production agriculture programs in 1981-82. Data were collected from teacher and senior students. The teachers reported two kinds of information about each student: the type of SOEP and general attitude toward work and fellow workers. Each senior student was asked to respond with an indication of level of competence for each of 52 competency statements. Two follow-up contacts resulted in a 93 percent usable response rate.

Significant differences were found in the perceived levels of competence in production agriculture according to the type of SOEP. Students whose SOEP focused on farm or agribusiness placement had significantly higher mean scores of perceived competencies than those whose SOEP focused on school land laboratories or home farm production. Students who resided in a rural farm area had a significantly higher level of perceived competence than those with residence in town, city or non-farm area. Students who focused their SOEP on school land laboratories had significantly higher levels of positive attitudes toward work and fellow workers.

It was recommended that all three types of SOEP be continued as a basis for providing vocational instruction to students coming from different kinds of residences. Additional research is needed which the use of other variables such as quality and length of placement program, quality of supervision, and quality of FFA program on the development of student competence.

Traore, M.S. (1983). Impact of agricultural extension on rural development in Mali. Master of Science research paper, Michigan State University, East Lansing.

The purpose of this paper was to review the government policies for, the planned role of, and the impact of extension in the rural development of Mali. Three research questions were asked: (1) What are the impacts of agricultural extension on rural development? (2) What are the problems encountered by farmers? and How does

extension go about solving the problems? The study was based on documents available through the library, embassy and personal experiences of the author while serving as an agricultural extension worker in Mali. An extensive review of information about Mali and the extension system, in relation to other institutions both inside and outside Mali, was the basis of conclusions regarding strengths and weaknesses of the extension program in Mali.

Wallace, D.K. (1983). Inferences about factors influencing minorities to avoid agricultural colleges and careers. Master of Science research paper, Michigan State University, East Lansing.

The purposes of the study were (1) to identify the factors which have influenced the apparent resistance of minority youth toward pursuit of agricultural education and careers, and (2) to design a program which could be used to encourage minority students to enroll in agricultural programs.

A literature review, panel of experts and personal experiences were used to identify factors which appear to influence minority participation in agricultural colleges and careers. Inferences (hypotheses) drawn from the list included: (1) minority students lack awareness and, consequently, interest in agriculture; and (2) agricultural college recruiters have done very little to attract minority students into their programs.

A program was designed, and tried out, which emphasized the areas of recruitment, retention, professional experiences, and placement. Recommendations for additional research include (1) a study of factors influencing career planning and career choice; and (2) a needs assessment among minority students.

Damhof, D.L. (1982). Assessment of the Willmar vocational cooperative education program: goals and processes. Master of education paper, University of Minnesota, St. Paul.

The problem addressed in this paper was a local assessment of the Willmar High School Cooperative Vocational Education program goals and operation. The specific goals of this paper were to establish outcome goals for the Cooperative Vocational Education program and obtain student assessments of the Cooperative Vocational program. Questionnaires were used to obtain the opinion of administrators, counselors, advisory committee members, employers, alumni members and students. The results from the questionnaires pointed out the desired Cooperative Vocational Education program outcomes to be (1) personal, (2) educational (3) societal, (4) equity, (5) economics. The results are very helpful and important as one plans objectives and goals for a Cooperative Vocational Education program.

Helt, L.F. (1982). The level of competence needed by beginning certified vocational agriculture teachers to serve special needs students, University of Minnesota, Minneapolis.

The national study was conducted to ascertain the needed and possessed competence of beginning vocational agriculture teachers to serve special needs students in mainstreamed secondary schools. A jury of experts validated the 50 competencies used in the study. Both beginning and established teachers rated the competencies using a Likert scale of one through nine. The teacher groups also identified educational and experiental sources that contributed most to their current level of competence. The established teachers consistently rated all but three competencies higher than the beginning teachers. Agricultural Education courses were found to contribute most to teacher competence. Teaching was rated as contributing most as an experiential source to teacher competence. Teacher inservice was found to be the major contributing source to both beginning and established teacher competence. A delivery systems model was developed for both preservice and inservice preparation of vocational agriculture teachers to serve special needs student populations.

Hoffman, D.L. (1983). Proposal for a vocational-agriculture classroom at Montgomery-Lonsdale High School. Facility study, University of Minnesota, St. Paul.

This study explored a high school facility problem, listed objectives or goals of a near ideal situation, examined future needs and offered a solution to the problem. The problem in this study was the lack of an adequate classroom for vocational agriculture instruction. Facts, figures, diagrams, tables, present and future enrollment trends, drawings and construction bid specifications were utilized to substantiate the need and offer a solution. A flow chart on facility problem solving was included. The procedures and information assembled in this study could serve as a model to someone attempting to solve a facility problem. The proposal was accepted with construction now completed and the classroom is currently used.

Kao, H.Y.R. (1983). Evaluation on Minnesota Agricultural Student Trainee Program, University of Minnesota, St. Paul.

This study was designed to evaluate the Minnesota Agricultural Student Trainee (M.A.S.T.) questionnaires accumulated from 1978 to 1982. Basically the questionnaires consisted of 5 perception groups: 1) program arrangement; 2) student's personal growth and cross communication; 3) student's professional learning; 4) readjustment upon returning home and 5) other literal questions. Group 1 through 4 were analyzed statistically using SPSS of the University of Minnesota. The basic statistic of each Group were calculated and this program was found to be above-average helpful. However, some question items were ranked No help or Extremely difficult more frequently than the others. Those items were listed and the reasons why they were ranked low were discussed and possible remedies were suggested. Besides, significant difference within each Group was calculated and only Group 3 was found to have significant difference.

Bonner, J. A. (1983). An analysis of the use of and attitudes toward advanced marketing practices by soybean farmers in the Mississippi delta. Mississippi State, Mississippi.

This study was conducted to determine the use of and attitudes toward advanced marketing practices, specifically, hedging in the futures market, by soybean farmers in the Mississippi River Delta region of the state of Mississippi. A second objective was to identify educational activities that may be emphasized to improve soybean marketing for farmers. Findings based on a mailed survey of 200 soybean farmers indicated that educational level, attendance in marketing seminars, and primary media and primary personal sources of soybean marketing information are important influencers of the use of and attitudes toward hedging in the futures market by soybean farmers. The conclusions and implications were that educational organizations with responsibilities in marketing can improve soybean marketing for farmers by adapting already-existing programs to more effectively utilize traditional media sources and by encouraging farmers to attend marketing seminars and other activities that promote professional and economic improvement.

Bowen, B. E. (1983). Identification and validation of computer technology competencies needed by vocational agriculture teachers and Cooperative Extension Service agents in Mississippi. Office of Graduate Studies and Research. Mississippi State University, Mississippi State, MS.

The primary purpose of this project was to identify and validate the computer technology competencies needed by vocational agriculture teachers and county Extension agents in Mississippi. A secondary objective was to explore the most effective methods of delivering the competencies. Five nationally recognized consultants determined the most essential competencies needed by the two groups of professionals. To accomplish the secondary objective, a national survey was conducted to determine the types of courses agricultural education students are taking in college to acquire computer experiences. This survey also focused on the computer-related inservice activities being delivered by agricultural education programs. One major finding was that the 104 essential computer competencies needed by teachers could be grouped into six categories: agricultural and Extension applications, awareness and literacy, hardware, instructional applications, programming in BASIC, and software. A second major finding was that 78 essential competencies are needed by the Extension agents, and only two are in the instructional applications category.

Kittrell, D. L. and Carpenter, J. R. (1983). Budgeting for county level Extension programs in the southern region. Staff Study, Mississippi State University, Mississippi State, MS.

This staff study was conducted to describe county Extension funding procedures and expenditures. Administrative perceptions of county ability to pay indicators were also summarized and ranked.

Thirteen administratively selected state representatives from each of the southern region states responded to a mailed questionnaire describing county contribution levels in each state. From this study, regional summary statistics were computed describing county contributions for salary, travel, equipment, contractual, commodity and fringe benefits. Also, the administrative representatives indicated the better county ability to pay criteria were: (1) number of farm families, (2) assessed valuation of both real and personal properties, and (3) total population.

The most frequently used procedure to acquire county funding was a negotiation procedure between Extension administrators and local governmental decision makers. The states with formal funding systems produced only a five percent higher contribution level than those using negotiation.

Seesang, S. (1983). Organizational and operational training needs of international agricultural workers. Doctoral dissertation, Mississippi State University, Mississippi State, MS.

What do international agriculture workers need to be taught, other than technical agriculture? A random sample of 389 international-experienced professionals was selected to respond to a researcher-developed instrument titled "organizational and Operational Training Needs of International Agriculture Workers." The instrument, with a reliability coeffieient of .95, yielded a 72% return with no significant differences between early and late respondents. Eighteen constructs were identified through factor analysis and were used as criterion variables in multiple regression analyses. While all constructs were perceived to be important, their degree of importance varied according to the position of the respondent (agricultural consultant, agricultural researcher, extension worker-trainer, project coordinator, or agricultural educator) and other predictor variables. In most cases the explained variance, though statistically significant, was of little practical significance. Therefore, the identified constructs should be of value as a source of curriculum content for professional international agriculture workers, regardless of position.

MISSOURI

Abdel-Rehim, S. (1983). Clientele and council officers' perceptions of the Missouri agricultural extension service. Doctoral dissertation, University of Missouri-Columbia.

The purpose of this study was to ascertain the quality of the agricultural extension programs as perceived by extension council officers and clientele. The sample consisted of 80 extension council officers and 240 extension clientele in 10 selected rural and 10 selected urban counties in Missouri. Data were analyzed using the analysis of variance and Fisher's Least Significant Difference Test (LSD) for mean separation. The findings were: (1) extension council officers and clientele in Missouri had a positive perception of the Agricultural Extension Service; (2) extension council officers had a significantly higher perception than did clientele concerning the services offered; and (3) extension clientele had significantly lower perception than officers concerning the experience and background of area agricultural specialists in urban counties.

Al-Shenaifi, M.S. (1983). Crop production activities performed by farmers and agricultural extension workers in Qasim, Saudi Arabia. Doctoral dissertation, University of Missouri-Columbia.

The purpose of the study was to ascertain crop production activities performed by farmers and that could be performed by agricultural extension workers in Qasim, Saudi Arabia. Data were collected from 45 of 48 agricultural extension workers and 100 randomly selected farmers. The questionnaire included 132 competency statements. Data were analyzed using chi-square and one-way analysis of variance procedures. Null hypotheses were tested at an alpha level of .05. Forty-nine of the 132 activity statements in the instrument were found to have significantly different frequency response ratios between the farmers and the agricultural extension workers. Five of the eight categories in the instrument were found to have significant differences between the responses of the two groups. Significant differences were found among the means of farmers for the variables of age, education, and years of work experience. Significant differences were found among the means of agricultural extension workers for the variables of age, years of work experience, and nationality.

Bennett, L.G. (1983). Safety program needs of Missouri vocational agriculture departments as identified by secondary school administrators and teachers of vocational agriculture. Doctoral dissertation, University of Missouri-Columbia.

The purposes of this study were to ascertain the perceived needs for dollars, equipment, or materials in order to implement safety precautions as identified by vocational agriculture teachers and secondary school administrators. Samples were randomly drawn to include 79 superintendents, 80 principals, 31 vocational directors, and 60 vocational agriculture teachers. The instrument used was the Safety Needs Assessment for Vocational Education. Data were analyzed using chi-square and one-way analysis of variance procedures. Null hypotheses were tested at an alpha level of .05. The results were: (1) A safe learning environment for public school vocational programs is a problem to most schools in Missouri; (2) Teachers and administrators perceive a need for dollars, equipment, or materials in order to implement safety programs in their schools; (3) The needs were perceived differently by administrators and teachers; (4) Administrators felt a need for items related to the image of the school and the investment of school monies which are common to all subject areas; (5) Teachers perceived a need for materials important in the daily instruction of students and because of the legal liability of the teacher; and (6) Teachers with only a few years of experience placed more emphasis on safety.

Case, L.D. (1983). Factors affecting the supervised occupational experience program in vocational agriculture. Doctoral dissertation, University of Missouri-Columbia.

The purpose of the study was to gather data from Missouri programs of vocational agriculture to ascertain if there were specific indicators of quality supervised occupational experience programs (SOEP). The sample included 94 secondary vocational agriculture programs from a population of 239 programs in Missouri with a 100 percent response rate. The dependent variable was a calculated SOEP score for each department. The formula for the calculated SOEP score contained six factors. The independent variables included 22 SOEP activities. The study utilized the discriminate function analysis and a stepwise regression analysis to analyze the data with an alpha level of .05. The results were: (1) A supervised occupational experience program score can be calculated which is an indicator of the quality of supervised occupational programs in vocational agriculture departments in Missouri; (2) Efforts to improve SOEP quality coul deal with one or more of the

following activities: percent of students completing both placement and ownership SOEP, number of supervisory visits per teacher, number of full-day equivalents per teacher for supervising students at fairs, number of class hours spent on SOEP instruction, number of meetings for parents to provide information on SOEP, frequency of using SOEP for lesson illustration, number of students with accurate SOEP records, and adequate travel funds for SOEP supervision.

Johnston, R.L. (1983). Effects of color and print size on readability. Doctoral dissertation, University of Missouri-Columbia.

The purpose of this study was to ascertain readability for color and print combinations of selected materials. The background colors were blue and white and the print types were standard 10 point pica and orator--types and colors readily available to educators. The sample for the study included 192 of the 323 secondary vocational agriculture teachers of Missouri. The subjects were randomly assigned to four groups. Based on the results of the study, it was concluded that: (1) The background color blue or white does not affect preference or readability for this group of subjects; (2) The type--standard 10 point pica or orator types--does not affect preference or readability for this group of subjects. Either of the types or background color would be effective in presenting printed materials to adult learners. Implications here are for college level courses, GED programs for adults and industry in its training programs.

Mick, J.H. (1983). Relationships between agricultural background and job placement of vocational agriculture graduates in Missouri. Doctoral dissertation, University of Missouri-Columbia.

The purpose of this study was to identify the relationship between job placement of Missouri seniors (1977) who studied vocational agriculture and selected variables. Data were collected from 1977 vocational agriculture graduates of 30 Missouri schools by use of educational records and a mailed questionnaire. The data were analyzed by a chi-square test for independence. Null hypotheses were formulated and tested at an .05 alpha level. The results were: (1) Students with strong supervised occupational programs were more likely to be in agricultural occupations; (2) While it was concluded that the quality of the SOEP influenced the initial placement and retention of graduates in agricultural occupations, graduates with weaker SOEPs were more likely to have moved from other jobs to agricultural occupations by the fifth year of job placement; (3) High school programs of vocational agriculture were likely doing a better job of preparing students with farm backgrounds and ownership types of SOEP for employment in agricultural occupations and there exists a need to provide more instruction about career opportunities in agriculture; and (4) Vocational agriculture graduates engaged in agricultural occupations were less likely to seek additional formal education and could benefit from programs of young farmer and adult education.

Dotter, W.A. (1983). Student project productivity and its relationship to existing student records. Professional paper, Montana State University, Bozeman.

This study was conducted to determine if student records can be used to predict performance on project work in the eighth grade industrial arts metal working class at Helena Junior High School. Data concerning GPA and achievement tests (SRA) scores were from guidance office files. An interest measurement instrument was developed. The interest instrument was administered to 65 students on the first day of class. Data show a relationship between GPA and achievement score averages for groups of high or low students as related to levels of project productivity. As a predictor for individual performance a high incidence of error was noted. Interest was not found to have a relationship with prediction of project productivity.

Harrington, D.E. (1983). A study to determine the extent to which secondary industrial and vocational education teachers in Montana are implementing the least restrictive environment component of public law 94-142, the Education For All Handicapped Children Act of 1975. Professional paper, Montana State University, Bozeman.

This study surveyed teachers of industrial and vocational agricultural education and the administrators of those programs, in Montana, to determine the extent to which handicapped students are being accommodated. Survey data also revealed the level of in-service and pre-service teacher preparation and what educational services are needed to accommodate the handicapped student in the vocational classroom setting. Agricultural education programs had the highest enrollment of handicapped students, among the groups surveyed, with 7% industrial education classes had a handicapped enrollment of 5%. In support of handicapped student enrollment in their classes, 50% of both industrial arts teachers and agriculture teachers have had no involvement in the IEP development process. Thirty-five (35) percent of the vocational agriculture teachers and twenty-seven (27) percent of the industrial education teachers reported previous academic preparation in working with the handicapped. In-service education opportunities and increased funding ranked as the most needed improvements for accommodation of handicapped students.

Jimmerson, W.C. (1983). Cooperative planning between local school boards in Montana and their vocational agriculture programs. Professional paper, Montana State University, Bozeman.

This study was designed to determine the perceptions of local school board members, as perceived by the chairperson, about Montana programs of vocational agriculture education. Areas of concern were: the extent, to which local boards are involved in planning the vocational agriculture program, how mutual planning is carried out between the school board and vocational agriculture instructor, and the benefits derived from mutual planning. A closed form, survey questionnaire was used to obtain data from the respondents. Data from the population show that cooperative planning between local boards of education in Montana and their vocational agriculture teacher occurs in 14 percent of the larger (AA & A) schools and in 49 percent of the smaller (B & C) schools. Furthermore, the vocational agriculture teacher was generally considered as the individual primarily responsible for planning the local vocational agriculture program with the advisory council ranking second. The major benefits of cooperative planning include: 1) acceptance of the vocational agriculture teacher as a member of the community, 2) retainment of this teacher, 3) a better vocational agriculture program offered, and 4) fewer major difficulties occur between the local school board and the vocational agriculture teacher.

Roadifer, W.P. (1983). Attitudes and perceptions of voters, teachers, and students toward the four-day school week at Sheridan County School District No. 1 West. Professional paper, Montana State University, Bozeman.

The purpose of this study was to determine the acceptance of the four-day school week as an alternative scheduling concept. The respondents were asked to compare the traditional five-day week to the four-day school week. Sixty-three teachers, 76 voters, and 281 students responded. The survey was divided into four major categories: 1) academic, 2) attitude, 3) scheduling, and 4) extracurricular activities. The major conclusion showed voters, teachers, and students accepted the four-day school week as an alternative scheduling concept. Further conclusions show students were enthusiastic about the four-day week and more respondents indicated they favored the four-day experiment than opposed it. Absenteeism for both teachers and students was reduced. Recommendation suggest that legislative support should be obtained, preplanning and systematic testing should be completed and then school districts should use caution before beginning a four-day school week.

NEBRASKA

Dillon, R.D. (1982) The Involvement of Nebraska Vocational Education Secondary School Advisory Councils in the Preparation of the Local Plan for Vocational Education. Staff study, University of Nebraska, Lincoln.

The specific objectives of the study were to (1) determine which vocational teachers and other members of the local school professional staff working directly with the advisory council in preparation of the local plan for vocational education, and (2) to determine the degree of involvement by the local advisory council in the decisions needed for the preparation of the local program plans for vocational education. A thirty percent random sample of 61 schools was selected from the population of public secondary schools in Nebraska with reimbursed vocational education programs. It is evident that agriculture, home economics and business and office teachers, and school administrators tended to be the most heavily involved in preparing the local plan. The majority of local advisory councils were involved in collecting and providing information, making recommendations before the local plan was drafted, reacting to the local plan before final preparation, and evaluating results at the end of the year. There was significant disagreement between faculty representatives and council chairpersons, using the chi-square test, about the procedures for making changes in the local plan. The recommendations were (1) that vocational teachers in all occupational program areas offered by the school should be involved as faculty representatives in preparing the local plan for vocational education, and (2) there is considerable opportunity for improving the understanding of both faculty representatives and council chairpersons regarding appropriate procedures for insuring council input prior to the time that policy decisions are made by the board of education concerning annual vocational education program adjustments.

Dillon, R.D. and Cromer, C.A. An Assessment of the Levels of Knowledge of Faculty Representatives in Nebraska Concerning Preparation of the Local Plan for Vocational Education in the Secondary School. Staff study, University of Nebraska, Lincoln.

A random sample of 61 secondary schools was selected from the population of 214 public secondary schools in Nebraska with reimbursed vocational education programs. An interview schedule listing nine knowledge areas needed for preparation of the local plan for vocational education was developed. The secondary school staff person who had the responsibility for coordinating vocational advisory council activities in each of the sixty-one schools in the sample were personally interviewed. The subjects were asked to rate themselves on the level of knowledge they had in the nine areas of knowledge concerning preparation of the local plan for vocational education. The two-tailed test was used to determine if there were significant differences between "knowledge I have" and "ideal knowledge" in each of the knowledge areas and for each occupational title group. Findings showed that faculty representative groups of agriculture teachers, home economics teachers, business and office teachers, and secondary principals had significant differences between "knowledge I have" and "ideal knowledge" for eight or more of the nine knowledge areas. Vocational directors had significant differences in five areas, superintendents in two areas, and the group including counselors, diversified occupations teachers, and distributive education teachers had four areas where significant differences were found.

NEW YORK

Breece, D.J. (1983). A Process for the Assessment of the Technical Competency Needs of Agricultural Teachers of Farm Production and Management." Doctor of Philosophy Dissertation, 1983, Cornell University, Ithaca, New York.

The purpose of the study was to develop a model for assessing the technical competency needs of agricultural education students. Secondary purposes were: (1) to gather information concerning the level of competency a student may expect to obtain by taking technical agricultural courses and (2) to determine technical inservice needs of teachers.

Three approaches were used to develop and study the process. First, a national survey of 85 head teacher educators was conducted to develop a clearer understanding of national concerns, trends and factors relating to the establishment of the process in teacher education programs. Secondly, self-assessment instruments and procedures were developed from technical competency/task lists previously developed by Cornell. Twenty undergraduates completed a self-assessment of technical competence and an advisor interview to analyze the technical competence of the student and to develop an academic and experience plan for acquiring competence. The instruments were also used with a group of agricultural teachers to determine technical inservice needs.

Thirdly, a college course analysis instrument was developed and used to locate and classify the agricultural competencies/tasks required of agriculture teachers of farm production and management. The instrument was used to survey 41 agriculture course instructors at Cornell University and 40 at Cobleskill, a two year agricultural and technical college.

It was found that teacher educators support stronger emphasis on the technical competency development of agriculture teachers. However, 27% of teacher education programs do not measure technical competency and 42% do not require a prescribed period of occupational experience. The process, developed from this study, provided an effective means to analyze a student's technical preparation, analyze college courses, determine inservice needs, and provide information to articulate needs with technical departments. The instrumentation and task numbering system was developed to be integrated into a computerized information management system.

Dugan, P.A. (1983). The Affective Work Competency Development of Vocational Agriculture Students Involved in SOE Programs in New York State

This study was designed to determine the extent to which affective work competencies of vocational agriculture students who conduct supervised occupational experience (SOE) programs vary by level of participation in SOE and FFA and level of work experience unrelated to SOE as perceived by vocational agriculture students, their agriculture teacher and work supervisor. Fourteen schools were purposely selected for their high quality SOE programs. The response rate for the sample of 14 teachers, 85 twelfth grade vocational agriculture students and 80 work supervisors was 86%, 81% and 64%, respectively after six follow-up contacts. A modified version of Affective Work Competency Inventory originally developed by H.K. Kazamas and K.D. Beach, and a section to collect program background characteristics formed the research instrument. In general, teachers and students rated student affective work competency development higher than work supervisors. The level of SOE participation and affective work competency development were not related although SOE was perceived to be important. The level of FFA participation and work experience (unrelated) to SOEP were associated with the development of a majority of the affective work competencies. The development of a majority of the work competencies under investigation were found to vary by the level of student FFA participation and work experience (unrelated to SOE). Most teachers lacked either Summer employment, mileage reimbursement, release time or supervising or other features needed to maximize the effectiveness of SOEP. Inservice education in SOE program development, better communication between teachers, students, and work supervisors on affective competency development, consultation with school administration to improve support for SOE, and attention to the relationship and importance of SOE and FFA are recommended based on findings from this research.

Fernandez-Alsina, M.A. (1983). Considerations in the application of frameworks for planning evaluation studies to an extension programming system in Argentina. M.S. Thesis, Cornell University, Ithaca.

A satisfactory system is lacking for the purpose of evaluating the extension programs of Argentina's National Institute of Agricultural Technology (INTA). A review of selected contemporary evaluation frameworks used in the educational environment of the USA resulted in three evaluation schools that presented the most likely application of those models to the characteristics, main elements, and decision points of INTA. Each of the three models selected was analyzed for its adequacy for INTA's extension programs and a final model was recommended and applied to an example of INTA work to show its potential application. The CIPP model proposed by Stufflebeam was recommended as the best model for evaluating INTA's extension programs. The application of the CIPP model appeared to be feasible and showed characteristics that would make it generalizable to other programs of INTA.

Fuatai, L.I. (1983). A Recommended Agricultural Education Curriculum for Junior Secondary Schools In Western Samoa. Masters Thesis, Cornell University, Ithaca.

The purpose of this study was to recommend an agricultural education curriculum for the junior secondary schools in Western Samoa. A task analysis was conducted of the crop and livestock enterprises, and their concomittant tasks as performed by small farmers. The study also examined the proficiency level of students for the same tasks. Data were collected from a sample of 50 farmers by personal interviews, and by questionnaires from 184 students. Major findings were that students were not proficient in almost all tasks, and that farmers did not perform all recommended tasks for crop enterprises and livestock enterprises. The major conclusions were that there should be one curriculum for all agriculture students in Western Samoa composed primarily of the core crops and livestock enterprises identified, and that a supplementary curriculum should address local needs. A recommended curriculum based on the task analysis and recommendations by experts was provided.

Fuess, H.L. (1983). Draft Horses, Breeds, Harnessing and Hitching. Masters Project Report, Cornell University, Ithaca.

The project consisted of two slide sets with scripts on draft horses. The titles were: "The Gentle Giants: Breeds of Draft Horses"; and "Harnessing Draft Horses". The first slide set describes the five major breeds of draft horses used in the U.S.A., and illustrates the ideal conformation and characteristics of each. The second set describes proper methods of harnessing and hitching draft horses togehter with a variety of uses for one or more horses. The sets are offered for a sale by the Cornell Instructional Materials Service, Ithaca, NY 148[illegible]3.

Lahis, S.B. (1983). The Institutionalization of Teacher Education In Agriculture For Lecturers In Agricultural Colleges In Papua New Guinea.

The study was designed to determine where the teacher education program for lecturers in agricultural education could best be institutionalized in Papua New Guinea. The case study approach was used in doing an analysis of factors related to institutionalization in two-year and four-year Colleges/Universities offering teacher education and/or agricultural curricula. Interviews were conducted with government officials, higher education administrators, faculty and staff. Recommendations for institutionalizations were made based on summary and analysis of the data, and current government plans for development.

Perry, S.S. (1983). An assessment of the reasons why FFA chapters do not exist in certain New York State vo-ag programs. M.S. Thesis, Cornell University, Ithaca.

There are a number of New York vocational agriculture programs that do not have FFA chapters for their students and so the study was to identify those programs, ascertain the reasons why not, and study possibilities for initiating chapters at these programs. The entire population of New York State vo-ag teachers who were not advising an FFA chapter and a 50% random sample of vo-ag teachers who were FFA advisors comprised the sample groups. Questionnaires were developed for each sample group to elicit information regarding professional background and work experience as a teacher, factors for not having an FFA chapter, and possibilities of aiding teachers initiate FFA chapters. Major finding were that teachers of agriculture in surburban and urban have difficulty relating FFA activities to their students and horticulture teachers with no FFA chapter have difficulty accepting FFA as relevant to their program. There is a lack of training and experience for non advisors, administrative support is lacking, and facilities are insufficient, yet the majority of non advisors indicated a willingness to receive experienced teachers as a resource on the FFA.

Debertin, Richard H. (1983). Morale Among North Dakota Vocational Agriculture Teachers. Master of Science Colloquium Paper, North Dakota State University, Fargo.

Purpose. The purpose of this study was to determine the level of morale of North Dakota high school vocational agriculture teachers. Specific objectives were to measure the level of morale of the entire group of teachers and the level of morale of the same teachers in sub groups of those with one and two years of teaching experience, three to five years of teaching experience and more than five years of teaching experience.

Method. The Purdue Teacher Opinionaire (PTO) was used as the instrument. The PTO measures morale level in ten different factor areas. The PTO form was mailed to all high school vocational agriculture teachers in North Dakota. Follow up mailings were used to improve response. A 93% response was achieved.

Findings. This study shows that in general a modest level of favorable morale exists among North Dakota high school vocational agriculture teachers. The highest level of morale exists in the factor of Satisfaction with Teaching. Two factors tie for the position of lowest level of morale. These are Teacher Salary and Teacher Load.

Among the groups based on years of teaching experience the general trend was for morale levels to be higher among those teachers with the greatest amount of teaching experience. The difference was greatest in the factor Teacher Rapport with Principal. The only areas which showed a decline in morale level as years of experience increased were the factors Teacher Status and Teacher Load.

Diatta, Sitapha (1983). Cooperation Between North Dakota Secondary Vocational Agriculture Teachers and County Agents in Carrying Out Selected Activities and Programs. Master of Science Colloquium Paper, North Dakota State University, Fargo.

Purpose. The purpose of this study was to determine the extent of cooperation between the North Dakota secondary vocational agriculture teachers and county agents in carrying out selected activities and programs.

Method. The population groups were North Dakota secondary vocational agriculture teachers and county agents. The sample included 82 secondary vocational agriculture teachers and 59 county agents.

A questionnaire was developed and sent to each respondent.

Seventy-nine or 96.3 percent of secondary vocational agriculture teachers and 56 or 94.9 percent of the county agents responded. The usable responses were 78 or 95.1 percent of secondary vocational agriculture teachers and 56 or 94.9 percent of county agents.

Frequencies, percentages, mean scores and standard deviations were used in analyzing data. In addition, chi-square was used to test differences of opinions on factors that influence cooperative efforts between the two groups.

Findings. 1. Cooperation between secondary vocational agriculture teachers and county agents occurred more often in activities or programs related to 4-H or FFA, and fairs and shows.

2. County agents provided more services than they received from secondary vocational agriculture teachers.

3. The respondents reported 12 of the 16 factors as having positive effect on their cooperative efforts. The four factors having negative or a slight negative effect on cooperation included: (1) difference of age (2) long distance (greater than 20 miles) between schools and county extension office (3) time conflicts in getting together for cooperative efforts and (4) lack of clarity of functions.

4. Significant differences of opinions between the two groups were reported for only four of the 16 selected factors. These were: (1) short distance (20 miles or less) between schools and county extension office (2) long distance (greater than 20 miles) between schools and county extension office (3) time conflicts in getting together for cooperative efforts and (4) lack of clarity of functions.

Al-Zahrani, K.H. (1983). Competencies needed by poultry producers in the eastern province of Saudi Arabia. Ph.D. dissertation, The Ohio State University, Columbus.

The purpose of the study was to identify and describe competencies needed by poultry producers in the Eastern Province of Saudi Arabia. The specific objectives were: 1)To determine perceptions of poultry producers about the importance, level of knowledge, and training needed for a list of competencies pertaining to poultry production. 2) To determine perceptions of professionals (poultry specialists and extension workers) about the importance of the competencies. 3) To determine the relationship between the importance of competencies as perceived by producers and the professionals. 4) To determine the relationships between selected characteristics of poultry producers including age, educational level, years of poultry experience, size of farm, and number of times extension workers or poultry specialists visit the farm. The target populations of the study were 106 broiler producers, 89 egg producers and 30 professionals. The samples were 54 broiler producers, and 45 egg producers drawn randomly; all 30 professionals were included. An interview schedule was developed to collect data. Poultry producers were asked to rate importance, level of knowledge and training needed for the competencies. Professionals were asked to rate, using the same five-point Likert scale, the importance of each competency. Poultry producers and professionals rated the competencies high in importance. Generally the producers rated the competencies slightly higher. Poultry producers rated their level of knowledge for the competencies to be low. Poultry producers indicated they need additional training.

Bigler, N.M. (1982) Factors contributing to the retention of volunteer 4-H club leaders in Ohio. Master of Science thesis, The Ohio State University, Columbus.

The purpose of the study was to determine if a significant difference existed between continuing volunteer 4-H club leaders and those who have discontinued in their perception of: their motivation for volunteering, the method by which they were recruited to the 4-H program, the orientation program, the continual training program, and recognition received. Attribute variables identified for the purpose of elimination as possible alternative explanations for the dependent variable were: number of years served as a 4-H club leader, sex, level of education, employment status, age, income, geographic location, number of family members, and number of family members who have participated in 4-H. The population studied was continuing and discontinuing volunteer 4-H club leaders

in Ohio. The sample consisted of 544 continuing (69 percent response) and 108 discontinuing (60 percent response) volunteer 4-H club leaders. Of the attribute variables identified, there was no significant difference between the continuing and discontinuing volunteers on all variables except: number of years served as a 4-H club leader, geographic location, number of children in family, and number of children in the family who have participated in 4-H. Of the main independent variables investigated, there was no significant difference between continuing and discontinuing volunteers on all variables except participation in a continual training program. Continuing volunteers reported a greater amount of participation in a continual training program than discontinuing volunteer leaders. A significant difference was found on two items pertaining to the recognition and attendance at a recognition program/dinner. Evidence from this study indicates that volunteers who receive continual training will continue to serve as volunteer 4-H club leaders.

Buriak, P. (1982). Effects of attention on psychomotor skill development in arc welding. Ph.D. dissertation, The Ohio State University, Columbus.

University students of introductory arc welding are required to divide their attention between concurrent visual and auditory input sources during supervised practice of an arc welding task. Visual inputs, the observation of the actual welding performance as it occurs, and auditory inputs, the verbal commands of the instructor, occur simultaneously. The specific objective of the investigation was to study arc welding instruction under conditions of divided and undivided attention and its effects on arc welding performance. Measures of performance were efficiency (time in minutes), quality (psi tensile strength), and an efficiency/quality ratio. The effects of various levels of pre-exposure (Ø weeks, 3 weeks, 6 weeks) to the traditional divided attention condition of related instruction (oxy-acetylene welding, or hot and cold metal working) was investigated to determine if students could learn to divide their attention. The experimental design employed was 2 x 3 x 3 factorial extension of the posttest only control group design. The sample consisted of all students registered and participating in the three class sections of Agricultural Mechanization and Systems 24Ø, Fabrication of Metals in Agri-business and Agricultural Applications, at The Ohio State University, Winter 1982. Subjects were randomly assigned by class by rotational group to levels of the treatment: X_1, divided attention between visual and auditory inputs; X_2, undivided attention between visual and auditory inputs. Results of analysis found students who

received arc welding instruction under the undivided attention condition completed the welding task more efficiently, F (1, 38) = 4.756, $p < .10$, and with significantly higher efficiency/quality ratios, F (1, 38) = 4.233, $p < .10$, than students receiving instruction under the divided attention condition. Further analysis found that students could learn to divide their attention, F (2, 38) = 4.077, $p < .10$, when exposed to prolonged instruction under a divided attention condition with no significant decrement in the resultant performance.

Dill, C.F. (1983). Knowledge, attitudes and teaching practices of vocational agriculture teachers concerning Public Law 94-142, the education for all handicapped children act. Ph.D. dissertation, The Ohio State University, Columbus.

The investigation was designed to describe the perceived level of knowledge, attitudes and teaching practices of vocational agriculture teachers concerning the provisions of Public Law 94-142, The Education for All Handicapped Children Act. Data were collected by mail questionnaire from a random sample of 262 vocational agriculture teachers in Ohio. Teachers were categorized by type of school: comprehensive high schools and joint vocational schools. The results revealed that vocational agriculture teachers perceived themselves as having an inadequate level of knowledge about the provisions outlined in PL 94-142. Teachers' attitudes toward the provisions of the Law were described as unsure, neither highly favorable or highly unfavorable. Vocational agriculture teachers indicated minimal involvement with teaching practices mandated in the Law. The data also indicated that there were no differences between teachers in comprehensive high schools and teachers in joint vocational schools on their perceived level of knowledge and their attitudes. When teaching practices were considered, teachers in joint vocational schools were implementing a higher number of teaching practices than were teachers in comprehensive high schools.

Dyer, P.A. (1983). The relationship of selected variables to the morale of Ohio vocational agriculture teachers. Master of Science thesis, The Ohio State University, Columbus.

The major purpose of this study was to determine if there was a relationship between the morale of Ohio vocational agricultural teachers and certain selected demographic factors and to further compare these teachers' morale with the morale of a norm group of junior and senior high school teachers nationwide. The overall morale of Ohio's vocational agricultural teachers is low. Those teachers with the lowest morale are those teachers with total responsibility for their FFA chapter's activities, those

with a Bachelors Degree and less than or equal to 20 additional hours of education, those agricultural production teachers with no responsibility for a Young Farmer program and those teachers in the smaller taxonomy areas. The areas associated with the lowest morale include heavy teacher loads, community pressures, dissatisfaction with teaching as a profession, large amounts of "red tape", and the number of problem students in their classes. Steps need to be taken to improve the morale of Ohio's vocational agricultural teachers, especially in the areas of teacher load, teacher status, community pressures, school facilities and services, rapport with principal, satisfaction with teaching, and rapport among other teachers.

Cartin, S.A. (1983). The relationship between characteristics of Colorado's American farmer degree recipients from 1968 to 1977 and their current occupational status. Ph.D. dissertation, The Ohio State University, Columbus.

The major purpose of this study was to investigate the relationship between the current occupational status of American Farmer Degree recipients in Colorado from 1968 through 1977 and their occupational and educational experiences at the time of application for the degree, selected demographic characteristics at the time of application, and their occupational and educational experiences since receiving the degree. The accessible population was 49 of the 52 American Farmer Degree recipients in Colorado from the years 1968 to 1977. Data were collected by telephone survey; 100 percent of the recipients responded. Recipients' responses indicate that 70 percent are owners in production agricultural businesses; 18 percent are owners of employees in non-farm or ranch agricultural businesses; and 12 percent are owners or employees in non-agricultural businesses. Forty-seven percent of the recipients do not have part-time employment in addition to their current occupation; 90 percent plan to continue their current occupation; 82 percent are involved in community and church activities; 74 percent are involved in school activities; 17 percent do not have membership in any agricultural organization; and 80 percent had formal education beyond the high school level. There are negligible to low relationships between current occupation and scores indicating the following: educational and occupational experiences at the time of application, offices held, operation and management, school and community activities, total leadership, recognition, earnings other than SOEP, management and efficiency, group activities, supervised occupation experience program, vocational education program, total SOEP, total application and leadership activities. Moderate relationships exist

between current occupation and financial statement and place of employment.

Gutheil, K.A. (1983). Selected Ohio vocational agriculture students: their attributes, vocational objectives and motivators for enrollment. Master of Science thesis, The Ohio State University, Columbus.

The purpose of this study was to identify the attributes, vocational objectives and motivators for enrollment of students enrolled in Agricultural Mechanics, Horticulture and Production Agriculture in Ohio. The research design was descriptive survey. A researcher-designed instrument was used to collect the data. The reliability and validity of the instrument were established. Ten schools, two offering Agricultural Mechanics, two offering Horticulture, and six offering Production Agriculture were randomly selected from the 1982-83 Agricultural Education Directory. The instructors of the randomly selected schools were contacted by phone and upon agreeing to participate in the study, instruments were sent for the students to complete. The following conclusions have been made based upon the data. Students enrolled in Agricultural Mechanics, Horticulture, and Production Agriculture have many different vocational objectives. Approximately eight percent of the students enrolled in Agricultural Mechanics and nearly forty percent of the students enrolled in Horticulture and Production Agriculture did not indicate a first or second vocational choice related to their taxonomy area of enrollment. There was a low relationship between the students taxonomy area of enrollment and their vocational objective. There was a negligible relationship between the students taxonomy area and the motivators of students to enroll. The attributes of the students were described. There was a low association between the selected attributes of the students and their vocational objectives and motivators for enrollment.

Harper, J.G. (1983). Correlational analysis of selected variables influencing safety attitudes of agricultural mechanics students. Ph.D. dissertation, The Ohio State University, Columbus.

The objectives of this study were to determine the strengths and directions of the relationships between selected student formative experiences, process variables, and agricultural mechanics student safety attitudes. Also, the study determined the proportions of variance in the student safety attitudes which could be explained by the student experiences and process variables. Furthermore, the study determined those variables which could best predict student safety attitude scores. The population of this study was a random sample of 258 agricultural mechanics students'

in Ohio. The sample was composed of three levels of students; high school vocational agriculture, two-year college students, and four-year university students. A survey instrument was developed to measure student safety attitudes and twenty-two independent variables. The instrument was composed of Likert-type five item questions and classification responses. Correlation coefficients were calculated to determine the relationships between the independent and dependent variables. Simultaneous multiple regression analyses were used to determine the proportions of variance in student safety attitudes explained by the sets of independent variables. Also, stepwise multiple regression was incorporated to determine those factors which best predict student safety attitude scores. The findings of this study indicated that there were relationships between the type of school a student attends, the students' type of work experience and the students' safety attitude score. There were no significant relationships between the students' involvement in accidents and their safety attitude score. However, there did exist significant positive relationships between the students' safety attitude scores and the students' perceptions of their: (1) Agricultural mechanics safety knowledge, (2) Teachers safety knowledge, (3) Teacher's safety attitude, (4) School safety environment, (5) Parent's safety knowledge, (6) Parent's Safety attitude, (7) Home safety environment, (8) Employer's safety knowledge, (9) Employer's safety attitude, (10) Work place safety environment. Based upon the multiple regression analysis the following variables and sets of variables explained a significant proportion of variance (R^2 = .43) in student safety attitudes: (1) Type of school, (2) School process variables, (3) Perception of safety knowledge. A stepwise multiple regression analysis determined that four variables of the original twenty-two were the best predictors of student safety attitude scores. (1) Students' perception of their teacher's safety knowledge, (2) Students' perception of their parent's safety attitude, (3) Students' perception of their agricultural mechanics safety knowledge and (4) Type of school attended.

Harris, D.E. (1983). Vocational agriculture teacher characteristics and their relationship to perceptions of SOE importance, attitudes toward supervision, and quality of supervised occupational experience programs. Ph.D. dissertation, The Ohio State University, Columbus.

The purpose of the study was to describe selected characteristics of vocational agriculture teachers in Areas I and II of Texas and to determine their perceptions of supervised occupational experience importance and their attitudes toward supervision of

SOE programs. In addition, the research focused on determining the relationship between quality of SOE programs and teacher characteristics, perceptions of importance, and attitudes toward supervising SOE programs. The target population sampled was 249 Texas vocational agriculture teachers in Areas I and II. The 1982-1983 Area I and II Directory of Vocational Agriculture Teachers served as the frame for this population. A simple random sample of 100 teachers was drawn from the target population (N = 249). Data were gathered by means of a mailed questionnaire. A follow-up post card reminder and letter resulted in a 90 percent response rate. The responses were analyzed using frequencies, percentages, measures of central tendency, point biserial correlations, and Pearson product moment correlations. No significant difference between the respondents and nonrespondents was observed; therefore, findings were generalizable to the entire population. The results of the study indicated that: (1) teachers believed SOE to be an integral and important part of vocational agriculture; (2) overall attitudes were positive toward supervising SOE programs; (3) teachers in lower quality programs placed a low emphasis on making supervisory visits and requiring SOE programs of their students; (4) teachers with high quality SOE programs recognized the importance of supervised occupational experience and had positive attitudes toward supervision; (5) significant ($p < .05$) positive low relationships were found between perceptions of SOE importance and attendance at the state vocational agriculture teachers' conference, number of teachers and students in a department, and departments with large FFA memberships; (6) significant ($p < .05$) positive low relationships were found between positive attitudes toward supervision and attendance at the state vocational agriculture teachers' conference, teachers having taken vocational agriculture in high school, and the travel money available for making supervisory visits; (7) significant ($p < .05$) positive low relationships were found between quality of SOE programs and attendance at the state vocational agriculture teachers' conference, administrative support for teacher time during the day for supervisory activities, and teachers utilizing the Texas SOE point guide system.

Hedges, L.E., Kouzekanani, K., and Watkins, L. (1983). Perceptions of the new and returning teacher inservice education program in agricultural education as held by teachers. Staff study, The Ohio State University, Columbus.

The primary purpose of this study was to determine the effectiveness of the new and returning teacher inservice education program for vocational agriculture teachers in Ohio offered by the Department of Agricultural Education at The Ohio State University based upon the perceptions of the beginning teachers. The study

sample included those Ohio teachers of vocational agriculture who had begun teaching in 1980, 1981 and 1982. A four-part survey instrument was developed. Section I was designed to measure the assistance new teachers perceived with 24 selected skill areas of the new and returning teacher program. The second section measured the perceived effectiveness of the quarterly seminars offered. Section three measured the perceived level of assistance provided by the three divisions of the new and returning teacher inservice education program. The final section measured the level of agreement or disagreement with recommended characteristics/competencies of supervising teacher educators. The average mean level of assistance provided by the new and returning teacher inservice education program for the 24 selected skill areas as perceived by teachers in the regular certification program (holder of bachelor's degree and a four-year provisional certificate) was 2.92, scale ranged from 4 (Very Well), 3 (Well), 2(Poorly), and 1 (Very Poorly). The average mean level of assistance as perceived by teachers in the 24-hour program (those who entered teaching directly from business and industry with a one-year vocational certificate) was 3.05. Teachers in the regular program perceived the level of assistance to be highest (top three) in "Teaching Classes," "Preparing Lesson Plans," and "Developing and Using a Course of Study." Teachers in the 24-hour program perceived the level of assistance to be highest in the skill areas of "Teaching Classes," "Preparing Lesson Plans," and "Planning and Giving Demonstrations." Both groups of teachers perceived the level of assistance to be lowest (bottom three) in the skill areas of "Organizing and Conducting Adult Education Courses," "Organizing and Conducting Young Farmer Education Programs," and "Selecting and Recruiting Students." The regular program teachers had an average mean score of 3.00 for the four quarterly seminars they attended during their first year of teaching, scale of 4 (Very Effective), 3 (Somewhat Effective), 2 (Slightly Effective) and 1 (Not Effective). The 24-hour program teachers perceived their seminars as being on the average "Somewhat Effective." Average mean level of effectiveness was 3.30. Both groups of teachers rated as most effective topic of each seminar, "Sharing Experiences To-Date." Both groups of teachers rated as being of greatest assistance the visits by their supervising teacher educators as compared to "Quarterly Seminar Discussions" and "Courses". Both groups of teachers indicated that they believed the supervising teacher educator did not go with them on a sufficient number of supervised occupational experience program visits to high school students.

Hedges, L.E., Papritan II, J.C. (1983). Master teachers of vocational agriculture: their distinguishing characteristics. Staff study, The Ohio State University, Columbus, Ohio.

The primary purpose of this study was to determine the distinguishing characteristics of master teachers of vocational agriculture. These characteristics would assist in describing teaching excellence in vocational agriculture. State supervisors and teacher educators in agricultural education at The Ohio State University were asked to nominate at least ten vocational agriculture teachers whom they considered to be master teachers. Considering the combined votes of the two groups, fourteen teachers were selected and provided with an opinionaire asking the respondent to complete the statement, "I feel teaching excellence in vocational agriculture involves _____." Common ingredients of teaching excellence mentioned most frequently were selected through content analysis from the returned opinionaires. The essential ingredients for teaching excellence in vocational agriculture offered by the master teachers included the following characteristics: keep technically up-to-date; be motivated; be interested in the student; set directions; evaluate performance; develop a positive attitude; use community resources; have a high quality supervised occupational experience program for each student.

Horton, R.L. (1983). Identification and selection of the appropriate leadership tasks for Ohio's teenage 4-H members. Ph.D. dissertation, The Ohio State University, Columbus.

The purpose of this study was to: (1) compare 4-H agent, club advisor, and teenage member perceptions regarding the importance of selected leadership tasks for teenage 4-H members, and the extent to which teenagers should be involved in carrying out these leadership tasks; and (2) examine the differences among agent, advisor, and member perceptions and formulate a set of recommended leadership tasks for Ohio's teenage 4-H members. A questionnaire was developed to measure agent, advisor, and member perceptions regarding selected leadership tasks for Ohio's teenage 4-H members. A total of 87 leadership tasks were identified and measured for importance and involvement using two five point Likert type scales. Questionnaires were mailed to 88 4-H agents, 200 4-H club advisors, and 200 teenage 4-H members in Ohio. A oneway analysis of variance including a Least Significant Difference post-hoc analysis was applied to test the differences between the mean importance and involvement scores of the three groups at the .05 level of significance. A state task force of 4-H Extension Specialists then examined these differences and established a set of recommended leadership tasks for Ohio's teenage 4-H members. The results of

this study reveal moderate to extreme ratings of importance and involvement for the 87 leadership tasks by agents, advisors, and members. The data also reveal that out of the 87 leadership tasks 4-H agents, club advisors, and teenage members agree on the level of importance of 48 leadership tasks and on the level of involvement of 53 leadership tasks. The leadership tasks identified by the state task force to represent the most recommended leadership tasks for Ohio's teenage 4-H members tended to be the more highly rated leadership tasks by 4-H agents. As a result of the analysis of data obtained through this study the following conclusions were drawn: (1) the views of the teenage members, while more in agreement with the club advisors than with the 4-H agents, were not favored by the state task force; (2) because 4-H agents, club advisors and teenage members tended to rate the leadership tasks similar, that is, at the same end of the scale, these data can be useful for designing effective teenage leadership training programs.

Kouzekanani, K. (1983). Extension education as perceived by educators and international students of extension education: a national study. Ph.D. dissertation, The Ohio State University, Columbus.

The study described extension education as perceived by educators and international students of extension education. Six subquestions under one major research question guided the study. This was a descriptive survey research of a comparative nature; it was a census study. The target population included 108 extension educators and 115 graduate international students of extension education at 26 Land-Grant universities. Data were collected through the use of a mail questionnaire in November and December of 1982; 93.5 percent of the educators and 85.2 percent of the students completed and returned the questionnaire to the researcher before the deadline. No significant difference between the respondents and nonrespondents was observed; therefore, findings and results of the study were generalizable to the entire population. Both groups agreed that an extension program planner should be able to perform the following: (1) Developing the institutional framework for program development. (2) Documenting the extension program--program determination. (3) Developing an annual plan of work--progarm strategy. (4) Implementing the program--program action. (5) Evaluating the program--accomplishments. The mean scores revealed that "Program Determination Process" was the most important one and "Program Action Process" was the least important one. Based upon the findings of the study, a model college preparation program for graduate students of extension education from the Third World was proposed. The model includes specific course topics which were found to be either essential or desirable for

the students to take during their course of study. The following are the top 10 course topics: (1) Program Planning and Development, (2) Evaluation of Extension Programs, (3) Administration and Supervision of Extension Programs, (4) Teaching Methods and Techniques, (5) Diffusion of Information on Agricultural Technology, (6) Extension Methods for Third World Countries, (7) Adult Learning Theories, (8) Use of Visual Materials in Communication of Agricultural Concepts, (9) Research Methods and Design, and (10) Staff Development. Also, the model suggests specific competencies which the students should master if they are to be effective extension program planners.

Krill, T.L. (1983). Superintendents' attitudes toward adult vocational agricultural education in Ohio's comprehensive high schools. Master of Science thesis, The Ohio State University, Columbus.

Adult vocational agricultural education has been in Ohio since the mid-eighteen hundreds, but not all Ohio schools participate in the program. A random sample of Ohio's comprehensive high school superintenderts that had a secondary vocational agriculture program were surveyed to discover what their attitudes were toward adult vocational agricultural education. Those superintendents were favorable toward adult vocational agricultural education in the comprehensive high school. The superintendents believed that agriculture is a viable industry and educational programs should be offered for anyone but directed toward adults directly involved in agriculture or agribusiness. Funding of the program should come from state and national funds and student fees and tuition. The adult programs should be conducted through the local administration and taught by the local instructor. The superintendents believed that an adult vocational agricultural program had many benefits for the individual, school, and community. Relationships between characteristics of the superintendents and their attitudes were studied but no significant relationships were found.

Maurer, S.J. (1983). Competency levels of vocational horticulture students regarding pesticide usage in Ohio. Master of Science thesis, The Ohio State University, Columbus.

The purpose of this study was to determine the extent to which pesticide education was occurring in vocational horticulture programs in Ohio, by assessing the level of competency of vocational horticulture students with respect to pesticide usage. The primary conclusions of this study, based on findings, were that the level of student performance on the exam was far below acceptable minimum standards with only about 33% of the students passing

the Ohio Pesticide Certification Exam. There was little difference between student performance on the exam based on whether or not the students' instructors had pesticide certificates. Instructors did not spend adequate time teaching calibration of pesticide spraying equipment which was reflected not only by teachers but also by student performance in that area on the exam. Two-thirds of the students did not pass the minimum acceptable level on the exam which is required for certification in the use of restricted pesticides in Ohio. This study illustrates that additional education in pesticides is needed by vocational horticulture students in Ohio so they can be better equipped to use pesticides.

Prister, J.A. (1982). An evaluation of the student teaching program in agricultural education at the Ohio State University regarding student teaching experiences and assignments and the performance of university supervisors and cooperating teachers. Ph.D. dissertation, The Ohio State University, Columbus.

The purpose of the study was to evaluate the extent to which the experiences and assignments expected during student teaching are needed and accomplished and the performance of university supervisors and cooperating teachers. The experiences and assignments and the responsibilities of university supervisors and cooperating teachers were identified from the Handbook for Student Teachers, 1981 and through an extensive literature review. Twenty-three experiences, 20 assignments, 12 responsibilities of university supervisors and eight responsibilities of cooperating teachers were identified. The following three populations were identified from the school years 1979, 1980, and 1981: university supervisors who were responsible for the supervision of student teachers (N=14), cooperating teachers with whom agricultural education student teachers were placed (N=88) and undergraduates who student taught (N=141). Responses were obtained from 14 university supervisors, 76 cooperating teachers and 108 student teachers. Stratified random samples of six university supervisors, nine cooperating teachers and eight student teachers participated in the interviews. Data were collected by means of three separate mailed questionnaires followed by face to face interviews with a sample of university supervisors and telephone interviews with a sample of cooperating teachers and student teachers. The responses to the mailed questionnaires were analyzed using frequencies, percentages, measures of central tendency and Kendall's coefficient of concordance and coefficient of rank correlation. The results of the study indicated that: (1) there was a very strong positive agreement in the rankings of need and accomplishment of experiences and assignments; (2) all experiences expected during student teaching should be continued except two; (3) student

teachers were adequately prepared to teach in the classroom; (4) the major areas of weakness were in adult education, supervised occupational experience programs, record books, and FFA; (5) activities of university supervisors rated the lowest were evaluating student teacher's lesson plan prior to observing the student teacher teach and serving as a resource person for cooperating teachers; and (6) activities of cooperating teachers rated the lowest were giving feedback prior to and after teaching, and allowing opportunities for adult education and supervised occupational experience programs.

Rohs, F.R. (1982). Social background, personality and attitudinal factors influencing the decision to volunteer and level of involvement among adult 4-H leaders. Ph.D. dissertation, The Ohio State University, Columbus.

The research examined the social background, personality and attitudinal factors influencing the decision to volunteer and level of involvement among adult 4-H leaders. The Smith Sequential Specificity Model of Voluntary Participation was used to hypothesize the influence of these factors on voluntary participation. The four measures of voluntary participation were (1) continued participation as a 4-H leader, (2) years of service as a 4-H leader, (3) hours spent per month at the local level, (4) hours spent per year at area and state events. Path analysis was employed to determine the direct and indirect effects these factors had on voluntary participation. A random sample of 300 adult 4-H volunteer leaders was selected. Data were collected from adult 4-H leaders in Ohio by mail questionnaire. Seventy-two percent of the leaders responded to the questionnaire. Of the several significant relationships found between the measures of voluntary participation and social background, personality and attitudinal factors, the strongest associations were found between voluntary participation and the social background factors of age of leaders and length of residence in the community. Path analysis techniques revealed that the direct effects of the specific attitudinal factors, influence of other 4-H'ers and influence of 4-H club advisors, negatively influenced a leader's length of service. The influence of neighbors, other parents and the 4-H agent were positively associated with a leader's length of service. The general attitudinal factor, instrumental value of 4-H, indirectly influenced a leader's length of service through the influence of significant others including neighbors, other parents and the 4-H agent. Since the findings only partially supported the Smith Sequential Specificity Model of Voluntary Participation, stepwise regression analysis was used to determine the direct effects of selected independent variables in the explanation of the variance

in length of service. The analysis revealed that the factors age, years as a 4-H member, whether children were in 4-H or not and attractiveness of 4-H had a direct positive influence on a leader's length of service and the occupational status of laborer had a direct negative influence on length of service. Collectively, these factors accounted for 65 percent of the variance in length of service.

Schumacher, S.D. (1983). The results of the section concerning program emphasis in 4-H from the 1982 survey conducted by the Ohio Cooperative Extension Service. Master of Science thesis, The Ohio State University, Columbus.

The purpose of this thesis was to identify where emphasis should be placed with the different program units in 4-H and to determine the relationships of the following selected attribute variables. (a) sex, (b) age, (c) area of employment and (d) area of residence. The principal conclusions found were that the respondents felt that some program units should be given higher emphasis while others should be given lower emphasis. Also there were significant differences between groups on each selected attribute variable.

Shibah, M. (1983). Analysis of the agricultural competencies needed by the farmers in Al-Hassa Oasis in Saudi Arabia. Ph.D. dissertation, The Ohio State University, Columbus.

This was a descriptive correlational study designed to describe the agricultural competencies needed by the farmers in the Al-Hassa Oasis in Saudi Arabia and to determine which extension teaching techniques the farmers most preferred. A three-part questionnaire, developed and validated for this study, was employed to interview a sample population of the farmers in Al-Hassa in order to acquire the data necessary to meet the following objectives: to describe the farmers according to selected demographic characteristics; to identify the relative importance as perceived by the farmers, of specific agricultural competencies in six categories of agricultural practice and to identify the extent of knowledge the farmers possess about those competencies; to calculate the farmers' training needs using the Borich formula; to determine the relationship between the selected demographic characteristics of the farmers and their calculated training needs; and to identify selected extension teaching techniques that the farmers most preferred and to determine the relationships between demographic characteristics and preferred techniques. The principal findings consist of rankings that show the agricultural competencies in which the farmers in Al-Hassa most need training and the extension teaching techniques by which

they preferred to be taught. Low and negligible relationships were found between demographic characteristics and the training needs of the farmers; relationships were discovered between preferred techniques of teaching and the variables of literacy, age and farming status (full- or part-time). These findings should enable extension planners to formulate more directed programs in attempting to assist the farmers in Al-Hassa.

Whitted, V.L. (1983). Results of Ohio Cooperative Extension Service needs assessment for agricultural industry programs. Master of Science thesis, The Ohio State University, Columbus.

The purpose of this study was to ascertain the future direction of Cooperative Extension Agricultural Industry programs for the next five to seven years. In order to achieve this purpose, certain objectives were developed. The first objective was to describe where program emphasis should be placed in commercial farming; in home, yard and garden topics; and through rankings of production, management and marketing areas for production agriculture enterprises. Additional objectives involved the determination of statistically significant differences between the level of emphasis placed on each topic and age, sex, place of employment and place of residence, respectively. The population studied was Extension clientele obtained from current Agricultural Industry mailing lists in each of the 88 Ohio counties by the use of a mailed questionnaire. Of the 8,800 potential respondents, 4,069 (44 percent) responded with useable data. The top four areas related to commercial farming to be emphasized in the future, as a result of the analysis of the data, included drainage, erosion control and conservation; farm financial planning and credit; farm records and enterprise planning; and small family farm programs. Vegetable and fruit production received the highest emphasis of the topics related to the home, yard and garden. More attention should be given to forage crop, small grain and corn production, dairy, sheep, poultry and forage crop management, and soybeans, beef and corn marketing. There were differences in responses to the commercial farming and home, yard and garden topics when broken down by the chosen attribute variables. In general, the females rated the home, yard and garden topics higher than the commercial farming items. Younger farmers tended to rate topics such as farm records, credit and energy management very high. Both farmer groups emphasized the commercial farming topics higher than other employment groups.

OKLAHOMA

Aliyu, M.A. (1983). The role and problems of agricultural information services in Kano-State of Nigeria. Masters report. Oklahoma State University, Stillwater.

The purpose of this study was to investigate the role and problems of the agricultural information services of the extension service in Kano-State of Nigeria. The primary aims were to determine the importance of 37 functions, requirements and problems in the order of priority, and to determine which needed attention. The questionnaire contained items relevant to the functions, requirements and problems of the Kano-State agricultural information service and was administered to 90 personnel of the Kano-State information service. Based on the results of the study the following conclusions were made: (1) the respondents considered the functions, requirements and problems of the agricultural information services to be important; (2) the effective utilization of the agricultural information service would have beneficial effects on agricultural development; and (3) for agricultural development to occur and succeed, research, training and extension services must coordinate their activities.

Calderon, T.G. (1983). Relative importance of selected areas of rural and community development in Venezuela and self perceptions of three educator groups as to ability to provide instruction and services in these areas. Masters thesis. Oklahoma State University, Stillwater.

The purpose of this study was to rank the relative importance of eleven areas of rural and community development as perceived by a farmer group and three groups of educators in the state of Portuguesa, Venezuela. This same group was asked to indicate the ability of their agency or constitution to provide instruction and services in these eleven areas. A questionnaire was administered to: (1) Ministry of Agriculture Extension Workers; (2) Vocational Agriculture Teachers; and (3) University Extension Faculty. While all eleven of the selected areas were recognized by the respondents as important, the three areas judged to be of paramount importance were: (1) crop production; (2) soil conservation; and (3) production credit. Those considered least important were: (1) family planning; (2) recreation; and (3) sanitation. The areas of moderate importance were: (1) livestock

production; (2) mechanical techniques; (3) communication skills; (4) potable water; and (5) first aid or health techniques. The ministry extension workers indicated the highest perceived ability to instruct and serve in the eleven development areas. The recommendations centered around providing training programs more directly related to community participation.

Campbell, J. A. (1983). Participants' perceptions of the effectiveness of the 1982 Washington Conference Program in terms of impact on local FFA chapters and leadership skills of participants. Masters report. Oklahoma State University, Stillwater.

This study assessed the feelings of 113 participants of the 1982 Washington Conference Program (WCP) in regards to the effectiveness of the WCP in providing the participant with leadership skills which benefitted the participant as an individual and in working with the local FFA chapter. The 113 respondents represented 75.3 percent of the 150 participants who received questionnaires, and 9.7 percent of the total population of the 1982 WCP. The mail questionnaire included items assessing the value of the WCP to the individual and local FFA chapter, the importance of the activities, the expectations of the program, the WCP influence on future aspirations of the individuals and the WCP influence on the local chapter. It was found individual development was greatest in social and human relations, personal communications, and citizenship. Group leadership and chapter impact sessions had the greatest use in the local chapter. Individual leadership training was considered slightly more important than group leadership training for working with the local FFA chapter.

Driskill, C.D. (1983). Selected characteristics of vocational agriculture mechanics programs in the State of Oklahoma. Doctoral dissertation. Oklahoma State University, Stillwater.

The purpose of the study was to determine the responses of Oklahoma high school agricultural mechanics instructors in the following categories: (1) appropriateness of area for high school vocational agriculture classes; (2) instructor's current competencies in the area; (3) adequacy of tools and equipment for teaching; and (4) quality of training and skills received at the university level. These categories were investigated for each of the five areas of agricultural mechanics. To gather this data, a questionnaire was administered to 236 vocational agriculture instructors in Oklahoma. More than half of the instructors had

received 15 or less credit hours of agricultural mechanics. The majority of the teachers were not teaching the five ag mechanics instructional areas. Most teachers viewed farm shop skills as the most important area. The amount and quality of training and skills at the university level was not meeting the needs of the instructors. Most teachers felt their tools and equipment for teaching agricultural mechanics were inadequate.

Golliver, J.S. (1983). Outside activities of Oklahoma vocational agriculture teachers of the central district and their opinions of outside activities. Masters report. Oklahoma State University, Stillwater.

The purpose of the study was to determine the outside activities of the central district vocational agriculture instructors and their opinions concerning these activities. Sixty one questionnaires were administered with 33 questionnaires completed. Ninety seven percent of the respondents participated in outside activities. Seventy percent of those involved in outside activities supplemented their incomes with these activities. The greatest amount of extra money from outside activities came from oil or gas royalties. Many of the outside activities also included community related activities. The activities consumed on the average between 11 to 20 hours per week. According to the instructors, these outside activities did not interfere with their teaching jobs and were not objectionable to community members and their students.

Hembree, D.R. (1983). Teacher perceptions of supervised occupational experience programs in Area I Texas vocational agriculture departments. Masters thesis. Oklahoma State University, Stillwater.

The objectives of the study were to determine: (1) general school policies related to SOEPs; (2) number of students and types of SOEPs; and (3) the perceptions of various aspects of SOEPs. A questionnaire was administered to 126 vocational agriculture instructors from Area I of the State of Texas. Over 85% of the teachers required SOEP's of their enrollees. Of those not requiring SOEPs, 85% indicated voluntary participation from 70-100% of the students. Participation in FFA activities was found to be strong at all levels. The major objectives of SOEP's ranked by the teachers placed emphasis on character building, enhancement of classroom instruction, and management skills. It was found that a

large percentage of the SOEPs were of a terminal exhibition livestock nature. The study indicated a need for parental involvement in planning and goal setting as related to SOEPs.

Kakiyes, N.K. (1982). Policy and procedures for the acquisition and use of production credit by Nigerian farmers in Plateau State. Masters report. Oklahoma State University, Stillwater.

The purpose of the study was to identify constraints limiting farm credit and ways of bringing about needed improvement in selected aspects of credit policy in Plateau State, Nigeria. A questionnaire was administered to farmers and lenders to gather the necessary data. The findings revealed that few lending agencies held adequate credit resources and that lending rates from local individuals and commercial banks were excessively high. Most farmers indicated difficulties in acquiring valid title to their land which has always been the farmers' major source of equity and collateral. Short repayment schedules were also identified as a definite constraint to credit. The following recommendations were made: (1) banks should be located closer to the rural areas; (2) interest rates should be kept as low as possible; (3) lenders should be more flexible concerning collateral requirements; (4) the "Cooperative Societies" should reorganize so they can be of more assistance to farmers; and (5) lenders should provide adequate supervision to assist farmers in determining credit needs.

Kane, A. (1983) Analysis of extent of use and effectiveness of selected methods of disseminating information on crop and livestock production in Senegal. Masters report. Oklahoma State University, Stillwater.

The purpose of this study was to analyze the extent of use and effectiveness of selected teaching methods. A questionnaire was administered to 52 extension workers and 165 farmers. The questionnaire included the perceptions of effectiveness and extent of use of the selected teaching methods for animal production topics and crop production topics. Ten teaching methods were used in the study. The extension workers and farmers rated three teaching methods for animal production as superior. These methods were: (1) Method demonstration meeting; (2) General meeting; and (3) Farm home visits. The highest rated teaching methods for crop

production were: (1) Method demonstration meeting; and (2) Farm home visits. The study revealed that in general most teaching methods for disseminating information were not effectively and extensively used.

Khademi, Z. (1983). Determining selected training needs of agricultural extension agents as a basis for formulating a training guide for agricultural extension agents that might be adaptable to developing nations. Masters report. Oklahoma State University, Stillwater.

The purpose of this study was to determine and analyze perceptions of agricultural students (at Oklahoma State University) from developing countries who are familiar with extension in their countries about the training needs of agricultural extension agents These perceptions were then used for formulating a training guide that might be adaptable to developing countries. An interview questionnaire concerning the eight areas of competency was developed for the collection of data. The majority of respondents indicated needs of training in all eight competency areas. There was indicated a great need for training of agricultural extension agents in developing nations. The extension service in developing countries should emphasize training programs on needs evaluated in terms of competency areas. The compentency areas and topics for training should include program planning and development, communication, social systems, human development, organization and administration, understanding extension programs, educational process and evaluation.

Kim, Y.J. (1983). Perceptions of administrators, faculty and senior students concerning the curriculum of four agricultural junior colleges in Korea. Masters thesis. Oklahoma State University, Stillwater.

The major purpose of the study was to secure and interpret perceptions of selected respondents as to both: (1) the relative importance for present and future; and (2) student adequacy for job performance, with regard to selected items found in the agricultural curriculum. Data were secured from: (a) administrators;(b) faculty; and (c) senior students from four agricultural junior colleges in Korea. One hundred fifty nine individuals completed the questionnaire. In general, the present

curriculum content was viewed as satisfactory by each group. The areas in the curriculum rated as most important for the present and future by the combined groups were: (a) Korean language; (b) farm management; (c) plant nutrition; (d) irrigation and drainage; (e) soil fertilization and fertilizers; (f) animal physiology; and (g) child development and guidance and (h) food preparation and nutrition.

LaCruz, P.F. (1982). Extension functions of a Venezuelan university which may enhance agricultural production and improve quality of life for farmers and their families. Doctoral dissertation. Oklahoma State University, Stillwater.

The major purpose of this study was to secure and analyze perceptions of: (1) representatives of extension agencies; (2) administrators and faculty of the university; and (3) farmers, regarding the ways that a university, through maintenance of an extension program can more effectively serve farmers and their families. A questionnaire-interview was administered to a random sample of: (a) university personnel; (b) extension personnel; and (c) farmers. The farmers and extension agents were decidedly more enthusiastic about a greater need for future emphasis in both agricultural productivity and quality of life. Recommendations made included: (1) securing adequate staff and faculty to coordinate, administer and evalute extension programs; (2) up-grading present extension programs; (3) establishing of a department of Rural and Community Development; (4) enlarging the base for curriculum development and review; and (5) implementing a series of seminars and conferences to include extension workers and other autonomous institutions.

Perez-Olivares, P.A. (1983). Perceptions of nine selected citizen groups regarding the animal science vocational agriculture curriculum in the Central-Western Region of Venezuela. Doctoral dissertation. Oklahoma State University, Stillwater.

The purpose of the study was to determine the involvement of current students, graduates, parents, farmers, teachers administrators, university professors and regional and national supervisors in the development and implementation of an animal science curriculum in vocational agriculture high schools in the

Central-Western Region of Venezuela. A vast majority of respondents in each of the groups considered their involvement in developing and implementing the animal science curriculum to be very low. Their perceptions also indicated a willingness, even eagerness to be included in all curriculum processes. Graduates, parents and farmers appeared to have a higher level of desire for involvement than even current students and teachers. The groups rated the knowledge and skill acquisition by students fairly low. Student attitude development rated high. It was recommended that curriculum development and implementation be refined; that people in the agricultural and educational communities be greatly involved; that regional and local curriculum committeees be developed; that curriculum workshops and seminars be organized; and that a Future Farmers of Venezuela be organized.

Plafcan, F.T. (1983). An assessment of the administrative skills of county staff chairmen in the Arkansas Cooperative Extension Service. Doctoral dissertation. Oklahoma State University, Stillwater.

The purpose of this study was to determine the importance and performance levels that Arkansas County extension agent-staff chairmen perceived themselves to possess in selected extension administrative skills and to identify areas in which future in-service training might be developed. A questionnaire was received from all 73 county staff chairmen. All the staff chairmen perceived the importance of the skills as generally higher than the perceived level of performance. It was recommended that training of a general administrative nature be conducted in the 19 priority areas identified. Staff chairmen who took courses in the behavioral and social sciences perceived higher levels of importance and performance. Overall the study documented a need for general training in administration for staff chairmen.

Pritchard, S.W. (1983). Perceived importance of guidelines and responsibilities for implementing a multiple teacher department in vocational agriculture at McCloud High School. Masters report. Oklahoma State University, Stillwater.

A questionnaire was developed to determine guidelines and responsibilities for creating a multiple teacher department at McCloud High School. All multiple teacher departments in the Central District (twenty, dual teacher and two, three teacher departments) for the school year 1982-83 were surveyed. Thirteen of

the thirty-one statements were selected by a majority of the teachers as of extreme importance. The item with the highest mean response indicated adequate transportation for all teachers was needed. All teachers' involvement in planning a classroom for each teacher; joint and cooperative service as FFA Advisor; current teachers involved in the selection of additional teachers, office space provided each teacher; teachers all applying equal discipline standards; teachers assigned equal supervision of student experience programs; teachers agreement on contest responsibilities; additional teachers selected to meet local department needs; daily communications among all teachers for decision making; detailed plans for immediate, future and long range teaching developed jointly; and all teachers belonging to the professional organization were rated extremely important.

Thompson, C.L. (1982). Vegetable purchase and useage patterns of the residents of Tulsa County, Oklahoma. Masters thesis. Oklahoma State University, Stillwater.

The primary purpose of this study was to determine the vegetable purchasing patterns, knowledge of alternate sources for vegetable purchase and the vegetable useage patterns of Tulsa County primary household food purchasers and the relation of their purchasing, knowledge, and usage patterns to selected demographic variables. A random sample of 384 were selected from the Tulsa telephone directory. Two hundred eighty six agreed to participate in the telephone survey. Most of the primary household food purchasers were Caucasian females between the ages of 27 and 36, had a household size of two members, were employed with a yearly household income of more than $20,000, purchased fresh vegetables once a week and spent between $26 and $75 per week on food. Respondents overwhelmingly used the supermarket as their primary source of vegetables, with most of the respondents using primarily fresh vegetables. The major factor influencing purchase was quality, while the vegetables cited most often consumed were potatoes, lettuce and green beans.

Stanford, C.L. (1983). Planning and implementing an agriculture mechanics shop facility in the vocational agriculture program at Shawnee High School. Masters report. Oklahoma State University, Stillwater.

The purpose of the study was to gather information in order to help in the planning and implementing of an agricultural mechanics shop facility at Shawnee High School. A questionnaire was sent to all vocational agriculture teachers teaching agriculture mechanics in the Central Supervisory District of Oklahoma concerning their shop facilities. It was calculated that the shop facility should provide at least 100 square feet of work space for each student in the largest class. It was concluded that the tool room area should be added with the possibility of storage overhead. Clean-up facilities and outside storage for the shop were very important. It also noted that an office with adequate furniture and location providing a view into both the shop and classroom was needed.

Sterling, D.J. (1983). Agribusinessses within the Shawnee-Tecumseh area which may provide training and employment opportunities for vocational agriculture students. Masters report. Oklahoma State University, Stillwater, Oklahoma.

The purpose of this study was to identify the agribusinesses in the Shawnee-Tecuhmseh area and to determine which of these businesses would provide training and employment opportunities for high school students enrolled in vocational agriculture. The information was gathered by means of an interview of 121 agri-related and semi- agri-related businesses. The agribusinesses were categorized according to the type of skills and services that were provided by the agribusinesses. The representatives of the agribusinesses were generally the owners or were in a management position. The largest group of agribusinesses were in the area of professional agriculture. Several of the agribusinesses had a total number of employees of 5 or less. The agribusinesses generally stated that students entering agribusiness careers need agricultural competencies and that these students need instruction in a broad spectrum of subject areas. The agribusinesses indicated that high school students need on-the job training and a high school education. A high percentage of the businesses believed their employment opportunities would increase in the future.

Wells, C.M.D. (1983). Teacher participation and perceived importance of FFA leadership activities in the Central district of Oklahoma. Masters report. Oklahoma State University.

The purpose of this study was to determine teacher participation in and perceived importance of FFA leadership activities in the Central District of Oklahoma. The population consisted of 93 vocational agriculture teachers employed in the Central District. Seventy of the teachers (75%) participated in the study. The information for this study was obtained by mail questionnaires. Data were analyzed using frequencies, percentages and overall means with regard to the statements included in the study. The teachers agreed that all FFA meeting activities except evaluation periods at the close of chapter meetings ranged from important to very important. Parent-member banquet was the only one of seventeen selected FFA leadership activites that was deemed as being a very important FFA leadership activity. Nineteen of twenty selected characteristics of good leaders ranged in importance from important to very important. Lack of student's time was the only constraint found to be somewhat of a hinderance to student participation in leadership activities. Thirty-four percent of the teachers participating in the study indicated they believed that both exhibition of livestock and FFA leadership activities were of equal importance.

Wiryono, P. (1983). KPTT Salatiga's one year adult education programs as perceived by its trainees, ex-trainess, and instructors. Masters thesis. Oklahoma State University, Stillwater.

The purpose of this study was to determine the perceptions of KPTT trainees, ex-trainees and instructors as to the importance, value and opportunity for use on 61 learning activities provided by KPTT Salaiga. A random sample of the three groups was made and an ANOVA test was performed to determine the differences of perceptions among these groups. The most important finding of this study was that most of the learning activities were perceived as highly important and highly useable. There was no significance of difference among the three different groups of respondents' perceptions. The highest ranked practical learning activities were: (1) planting rice; (2) raising chickens; (3) making compost; and (4) village exposure experience. The highest ranked theoretical learning topics were: (1) pests and disease; (2)

staple crops; (3) large livestock; (4) rural development; and (5) personality and character building. It was recommended that those learning activities that were perceived as not very important be eliminated or significantly reduced in the curriculum.

Yorama, M.T. (1983). Designing a dairy/beef cattle production program attractive to the youth of the Niger Delta Area of Nigeria. Doctoral dissertation. Oklahoma State University, Stillwater.

To obtain the requisite information for designing a program of dairy/beef cattle production in one of Nigeria's potentially production areas - the Niger Delta, a modified delphi techinique was utilized. Instruments employed allowed for administrators, butchers, veterinarians, policy makers, legislators, and livestock experts to suggest what they considered to be the most appropriate programs, processes, or methods of dairy/beef production which would be attractive to the youth of the Niger Delta area, suitable administrative agencies, and all foreseen limitations that could hinder such a program. When given a choice among responses listed earlier, nearly one half of participants (46%), shifted to private commercial production as the most appropriate method, followed by farmer cooperatives (18%). The limitation to dairy/beef production listed most often was "financial management (capital availability)" (31%), followed by "farm and industrial technology" (18%), and "manpower--professional skills" (17%). It appears that a viable program, attractive to youth, should limit the scope of government participation. It should emphasize private commercial production, subsidized by government, with access to responsible financial agencies.

Cole, R. L. and Herren, R. 1983. Attitudes of oregon vocational agriculture teachers toward the supervised occupational experience program component of the vocational agriculture curriculum. Staff study. Oregon State University, Corvallis.

The purpose of the study was to determine the attitudes of Oregon vocational agriculture teachers toward the SOEP component of the local vocational agriculture program in light of the present (slow) economic climate. Attitudes were also compared between those teachers who have not strongly emphasized SOE programs. An instrument developed by the researchers was administered to a stratified random sample of vocational agriculture teachers in the state. Stratification was based on 1) those teachers who had, and 2) those teachers who had not maintained a strong SOE program. Data analysis showed that while both groups agreed as to the importance of SOEPs to the total vocational agriculture program, the groups disagreed in areas such as "SOEPs make agriculture programs vocational" and "SOEP should be required of all students". It appeared that philosophical disagreement may have led to different levels of commitment on the part of vocational agriculture teachers.

Cole, R. L. 1983. Oregon vocational agriculture teacher placement and retention factors. Staff study, Oregon State University, Corvallis.

Does technical agriculture knowledge and skill affect an agricultural education major's decision to take an initial vocational agriculture teaching position, or does it impact how long a vocational agriculture teacher stays in teaching? An instrument was developed and tested for agricultural education graduates who never taught, taught and left, and are still teaching. The responses were compared to determine if technical agriculture knowledge and hands-on skill affected teacher placement and/or retention. Results indicate that increases in the quality of coursework in technical agriculture for both hands-on skill and scientific knowledge should be made to increase initial teacher placement and to improve retention of vocational agriculture teachers. Pedagogy in Agricultural Education was shown to be extremely important to the longevity of vocational agriculture teachers. Pedagogy courses must be as "real world", application-oriented as possible for maximum impact. long range occupational plans of graduates showed high correlation to eventual occupational selection.

PENNSYLVANIA

Ayewoh, M.E. (1982). Enrollees' source of information, perceived value, and attitude toward non-credit agricultural correspondence courses. Master of education paper, Penn State University, University Park.

The study was to assess enrollees' sources of information, perceived values, and attitude toward non-credit Agricultural correspondence study courses offered by The Pennsylvania State University, College of Agriculture. The population for this study consisted of 3,990 residents of the State of Pennsylvania who subscribed to Agricultural correspondence study courses offered by The Pennsylvania State University in 1980. A survey questionnaire was sent to a ten percent random sample selected for study. The significant reasons for the enrollees' subscribing to correspondence courses were: (a) to improve leadership skills, (b) to achieve greater sense of personal identity, (c) to improve general knowledge, (d) to make more productive use of time, (e) to do what I wanted to do earlier in life; and (f) to improve job skills.

Baker, L.C. (1983). Analysis of the perceptions of Pennsylvania vocational agriculture teachers concerning vocational agriculture summer activities. Master of education paper, Penn State University, University Park.

The study was designed to determine the most important selected summer educational activities, to determine the amount of time allocated to groups of selected summer educational activities, and to determine if the time allocated to different summer activities varies with respect to the agriculture program area of emphasis. One hundred randomly selected vocational agriculture teachers were surveyed to determine their perceptions of selected summer activities. Summer activities were ranked in order of importance as perceived by teachers. Major findings of the study were: (a) the SOE method of instruction is more important to production agriculture teachers than non-production agriculture teachers, (b) the SOE method of instruction is perceived by all teachers as the most important summer activity, (c) the resource improvement activities and the professional growth activities are more important to non-production agriculture teachers than to production agriculture teachers; and (d) teachers of production agriculture ranked FFA activities second and instructional improvement activities third while the teachers of non-production agriculture ranked instructional improvement activities second and FFA activities third.

Dobbs, M.L. (1983). The influence of task instruction sheets on 4-H horse club members performance scores. Masters of education thesis, Penn State University, University Park.

The study was to investigate the effect of using task instruction sheets on the performance scores of 4-H club members studying horse management. The sample consisted of six randomly selected 4-H horse clubs from counties in the southeastern section of Pennsylvania. Six horse management clinics were conducted offering instruction on four competency-based horse management tasks. The four tasks were: "Grooming a Horse"; "Wrapping a Stable or Traveling Bandage on the Four Legs of a Horse"; "Determining the Rectal Temperature of a Horse"; and "Wrapping a Horse Tail." The volunteer 4-H horse club leaders explained and demonstrated each of the tasks. The 4-H club members practiced the tasks and were evaluated on their performance using criterion-referenced measures. The major findings of the study revealed that 4-H horse club members who used task instruction sheets scored consistently higher than 4-H horse club members who did not use task instruction sheets.

Goodale, D.M. (1983). Cost-effectiveness analysis of two-year postsecondary curricula: a case study. Doctoral thesis, Penn State University, University Park.

The study was to determine the usefulness of the Kim-Harris cost-effectiveness model for evaluating two-year postsecondary curricula. Two agricultural and technical colleges from the State University of New York (SUNY) were selected for the study. The total population of graduates from two agronomy curricula from 1977 through 1981 were selected for this ex post facto study. A 78.8 percent response rate was achieved from a target population of 141 graduates. Data were collected through a mail questionnaire and the Job Descriptive Index to measure job satisfaction. The Kim-Harris model was found to be a viable model for determining a program's cost-effectiveness. Suggestions for improving the Kim-Harris model included development of parameters for interpreting calculated internal efficiency values, cost-effectiveness ratios, and program effectiveness scores. Utilization of the Kim-Harris model revealed the two programs to be cost effective. Cost-benefit ratios revealed a value of 3.42 for Cobleskill and 5.92 for Morrisville. Calculated internal rate of return revealed a 44.2 percent rate of return for Cobleskill's and 71.8 percent for Morrisville's agronomy program.

McCoy, J.S. (1983). Graduates' perceptions regarding the goals/ objectives for the college of agriculture. Doctoral thesis, Penn State University, University Park.

This study was to evaluate the extent to which the six established objectives and related goals for the College of Agriculture at Penn State University were being accomplished and the degree to which graduates perceived the indentified objectives as relevant to their professional development. A combination of stratified random sampling techniques were used to identify the sample. A 63 percent usable return was obtained through the mailed questionnaire. Two hypotheses were formulated and tested. The major results of the study revealed that recent graduates in general believed all six objectives and related goals to be valid for programs in the College of Agriculture (Hypothesis one). Furthermore, recent graduates perceived they had attained a "medium" level in accomplishing the objectives upon graduation from the undergraduate program (Hypothesis two). Specific recommendations were made for the instructional program in the College.

Myers, C.A.B. (1983). Skills needed by novice Pennsylvania shepherds and evaluation of available sheep publications. Master of education paper, Penn State University, University Park.

After a steady decline in sheep numbers in the United States, Pennsylvania, and Berks County, these numbers and the number of shepherds have increased since 1978. In Pennsylvania and Berks County this increase has occurred in part becuase of hobbyist, small, part-time farmers getting started in the sheep business. It was theorized that what is needed for teaching new shepherds sheep husbandry is a basic manual that allows beginning sheep producers to comprehend the skills and competencies needed to be successful. To find what skills and competencies are needed by novice shepherds, 30 Pennsylvania sheep producers, 30 vocational agriculture instructors, and 30 Cooperative Extension personnel were sent a survey instrument. One hundred forty-nine competencies were rated from 1 (not important) to 5 (essential) in having the skill or competency discussed as part of a basic shepherds' manual. Additional questions relating to the need for a novice shepherd manual, format, and cost were part of the survey instrument. Sheep publications currently available were analyzed and evaluated relating to the potential use in teaching the competencies needed by novice shepherds. The research indicated a real need for a sheep production manual for novice Pennsylvania shepherds. Evaluation of sheep publications indicated the existence of manuals and textbooks which discuss a majority of the highest rated skills determined from the survey instrument. However, no single sheep publication exists which discusses the majority of these highest rated skills.

Shaeffer, W.C. (1983). An evaluation of predicted and actual corn production yields on selected land use capability classes of young farmer corn club members in West Snyder High School. Doctoral thesis, Penn State University, University Park.

This study was undertaken to identify western Snyder County, Pennsylvania, on which young farmer corn club participants were growing corn; to correlate the levels of predicted and actual production; and to evaluate the cultural and management practices being employed. The data for this study were taken from the 1979 through the 1981 Corn Club Summaries of the West Snyder Young Farmers. Soil information was obtained from the Soil Survey Interim Report for Snyder County. Changes in the management practices were obtained via a questionnaire enumerating management practices attributed to the Corn Club. Findings indicated that: (1) there was no relationship between predicted corn yield and actual corn yield; (2) there was very little difference in corn yields among the three land use capability classes evaluated; (3) there was a relationship between fertilization rates and corn yields for each land use capability class; (4) the cost per bushel was directly related to yield with higher yields having lower costs per bushel; and (5) the participants in the Corn Club adopted a variety of new management practices as a result of Corn Club participation.

Wongsamun, C. (1983). Analysis of selected factors affecting the success of community 4-H clubs in Pennsylvania. Doctoral thesis, Penn State University, University Park.

The study was designed to assess the impact of 4-H club characteristics and 4-H volunteer leaders and members toward the success of 4-H clubs. Thirteen criteria were used to identify more and less successful 4-H clubs. Data were collected from 750 organizational leaders, project leaders and 4-H club members (81.9% useable response rate). Major findings indicated more successful clubs had a greater number of club members, adult leaders, teen leaders, projects, members involved in each project, new projects and/or activities, club committees, members on each club committee, project committees, and community organizations providing support to the club. Volunteer leaders in more successful clubs perceived they had a greater understanding of their duties and responsibilities and their club meetings were better controlled than did the leaders in less successful clubs. Project leaders in more successful clubs perceived their organizational leaders were more democratic than did project leaders in less successful clubs. The teenage 4-H members in more successful clubs perceived their clubs had more effective organizational leaders, greater adequacy of projects, and a more democratic climate at meetings. The members in more successful clubs felt that their project leaders were better prepared for each project meeting than did the members in less successful clubs.

Lamberth, E.E. (1982). Professional competencies needed and presently held by the beginning teachers of vocational agriculture in Tennessee. Staff study, Tennessee Technological University, Cookeville.

This study identified and verified the professional education competencies needed and presently held by beginning teachers of vocational agriculture in Tennessee. To obtain these data, the researcher designed a survey instrument that listed 99 competencies under the following areas: planning of instruction; execution of instruction; evaluation of instuction; advising student vocational organization; and supervising student occupational experience. The 30 beginning teachers who completed the survey rated the level that each competency was held by and needed by beginning teachers. After determining measures of central tendency for both the competency levels needed by and held by beginning teachers, the researcher calculated the difference between the two means and, thereby, determined the need for inservice competency-based activities. Ninety-six of the 99 competencies needed by beginning teachers received mean ratings of 3.00 or higher, and 93 of the 99 competencies presently held by the beginning teachers received meaning ratings of 3.00 or higher.

Lamberth, E.E. (1982). Technical competencies in greenhouse management and landscape design needed by high-school teachers of vocational horticulture in Tennessee. Staff study, Tennessee Technological University, Cookeville.

This study identified and verified the technical competencies needed by high-school teachers of vocational horticulture in Tennessee in the areas of greenhouse management and landscape design. To obtain these data, the researcher designed a survey instrument that listed 108 competencies under greenhouse management and 31 competencies under landscape design. The source used for developing the instrument was the Tennessee Ornamental Horticulture Competency Based Curriculum. The 35 teachers who completed the survey rated the level that each competency was needed by high-school vocational horticulture teachers. Measures of central tendency were calculated for the competencies. All 108 competencies in greenhouse management needed by the teachers received mean ratings of 3.00 or higher, and all 31 competencies in landscape design needed by the teachers mean ratings of 3.00 or higher.

Curtis, Danny M. (1983). Reasons Tennessee Vocational Agriculture Teachers Leave the Profession. Master of Science Thesis, The University of Tennessee, Knoxville.

The purpose of the study was to determine the reasons why Tennessee vocational agriculture teachers leave the profession. The sample study consisted of 120 former vocational agriculture teachers who left the profession for reasons other than retirement from July 1, 1976 to June 30, 1982. Ninety-six or 80 percent of the teachers responded to the survey. The data were obtained from a 33 item Likert-type questionnaire that was mailed to each former teacher. The reasons in the questionnaire for comparison purposes were divided into the four categories: personal, job characteristics, administrative, and student. The five factors which had the most influence in causing teachers to leave the profession were: (1) there was little chance for advancement, (2) salary was too low for the amount of hours worked, (3) there were students in the class who should not be in agriculture, (4) promotions and salaries in other agricultural areas were more promising, and (5) teachers desired better economic and social conditions. It was also found that student reasons, collectively, had more influence in causing teachers to leave than did job characteristics, personal, or administrative reasons. It was also found that vocational agriculture teachers under 35 years of age reported having significantly more problems with the administration than did the older teachers. Vocational agriculture teachers with less than five years of teaching experience reported having significantly more problems with the administration than did the more experienced teachers. Among the teachers who left the profession, those who taught in rural areas seemed to have less job characteristic reasons influencing them to leave than did teachers from the cities.

Moss, J.W. (1983). Identification and validation of student competencies necessary for entry into vocational programs with implications for special needs learners. Doctoral dissertation, Texas A&M University, College Station.

This study was designed to identify and validate competencies needed by students for entering selected vocational programs. Data were collected from exemplary vocational teachers in Texas in the program areas of vocational agriculture, vocational home economics and the building trades program of vocational industrial education. The teachers gave their perceptions of the importance of selected competencies for entering their vocational program and the comparative frequency with which the competencies would be required of students. Over 65 competencies were identified in each of the three program areas in five categories: language skills, computational skills, social skills, physical/sensory skills and specialized skills. Competencies in the social skills category were considered to be the most important entry level skills by all three groups of vocational teachers, while specialized skills related to the subject matter of the vocational program were considered to be the least important.

Henley, G. L. (1983). Determining vocational agriculture teachers' attitudes regarding videotapes as an instructional media. Texas Tech University, Lubbock, Texas.

The purpose was to assess videotape usage by Texas vocational agriculture teachers in high school programs to determine the following: 1. utilization of videotapes; 2. factors which limit videotape usage; 3. appropriate subject matter areas for videotape development; and, 4. effectiveness of videotapes. Texas vocational agriculture departments, totalling 934 departments, were randomly sampled and a total of 312 departments or 33.3 per cent were mailed questionnaires. Data obtained were summarized by frequency of response and were ranked accordingly. Videotapes were used in over 40 per cent of the departments. Videotapes most frequently used to supplement instruction were in the leadership area while animal science and agricultural mechanics ranked second and third respectively. Storage and maintenance of video equipment was most frequently done by the schools' administrative staffs. The most common type of videotape equipment was the one-half inch VHS cassette. In over 75 per cent of the departments, teachers indicated videotapes would be used if tapes were available. Availability of prepared tapes and lack of knowledge of the process were the most limiting factors of videotape usage. Videotapes were needed most frequently for animal science instruction while leadership and agricultural mechanics ranked second and third of the nine curriculum areas examined.

Aliya, C.B. (1983) Dry bean field demonstration in south Logan, Utah, summer 1982. Master of science thesis. Utah State University, Logan.

In the summer of 1982, the author grew a 385 foot long and 76 foot wide plot of dry beans (Phaseolus vulgaris l.) at the USU South Experimental Farm in Logan, Utah. The purpose of the experiment was mostly to gain practical experience in terms of planning, conducting and evaluating a field demonstration, to stimulate Cache Valley farmers' interest in this important food crop, and to report the findings to them. The nine varieties tested were disease-free cultures from Wickes Agriculture in Jerome, Idaho, among which two white varieties, five kinds of Pinto and two kinds of Red Mexican were accounted. They were planted on May 26th, 1982, on two rows each at 36 inches apart and 6 inches between plants. The harvest lasted from the 9th to the 16th of September, 1982. Yield performance, nutrient content, average height of plants, numbers of pods per plant and plant density were determined from random samples taken throughout the plot.

Ansari, A. (1983) A field demonstration of the impact of nitrogen fertilizers on barley yields in Benson, Cache County, Utah, 1983. Master of science thesis. Utah State University, Logan.

A demonstration was conducted as a method of Agricultural Extension at Benson, Cache Valley, Utah. The purpose of the demonstration was to show the effect of the nitrogen fertilizer in barley growth and yield. Three different rates of nitrogen fertilizer were applied to three plots at the demonstration site. The application rates were 50 lb N/acre, 100 lb N/acre, and 150 lb N/acre. The difference in plant vegetative growth was obvious. The crop was harvested after 118 days and the grain was weighed for each plot. A field day was held at the demonstration site. The purpose of the demonstration and its results were explained to the farmers, and their questions were answered.

Baghi, A.R. (1982) Adaptation of eggplant in the great basin region. Master of science thesis. Utah State University, Logan.

Twenty-nine different cultivars of eggplant (Solanum melongena L.), open-pollinated and hybrid, were trailed for their possible adaptability to the Great Basin Region. The response

of the 29 cultivars of the eggplant to possible adaptability were accounted from fair to high. S. melongena cv. Jersey King produced the highest numbers and weights of fruit, but was late maturing and low in quality. Late maturity nature of Jersey King makes it suitable and adaptable to those regions of the Great Basin having long growing seasons with subtropical conditions, such as southwestern Utah and high desert areas of New Mexico and Arizona. S. melongena cv's. Midnite and Early Beauty were early maturing, highly productive, with a very fine tasting quality, making them adaptable to all parts of the Great Basin Region. The superiority of Midnite and Early Beauty to the other varieties may be explained by their wider gene pool which makes them adaptable to diverse environmental conditions.

Banks, J.E. (1982) 1981 Grain corn demonstration in northern Box Elder County, Utah. Master of science thesis. Utah State University, Logan.

In the summer of 1980, an International Agriculture Extension Option for a Master Degree in Agricultural Education was instituted at Utah State University. This program was developed with two goals in mind. First, prepare potential or existing extension agents in the area of administration procedures. Second, give the students actual experience in the area of field demonstration work. The major purpose of this study was to gain practical experience in the area of field demonstration work while reporting the results of the demonstration plot to the interested corn producers. The following were the objectives of the study: (1) establish a grain corn variety demonstration plot in Northern Box Elder County, Utah; (2) identify the high, medium, and low producing corn varieties from the results of the demonstration plot data; and (3) report the results to interested corn producers in the Box Elder County area.

Denton, G.W. (1982) Occupational status and program-related views of the 1977 graduates of vocational agriculture in Utah high schools. Master of science thesis. Utah State University, Logan.

The purpose of the study was to determine the occupational status of high school vocational agriculture graduates in Utah and their satisfaction with the training received. Graduates of 15 stratified randomly selected departments were surveyed. Almost 55 percent of the graduates responded that they were engaged in an agricultural occupation and another 7 percent were studying agriculture in college. Most graduates felt favorable about their vocational agriculture training and that the program should continue the strong inclusion of laboratory instruction,

FFA, and supervised occupational experience in the total vocational program. A positive relationship was found between the following: (1) years of FFA membership and the program related views of the agricultural graduate; (2) years of supervised occupational experience and the program related views of the agricultural graduate; (3) academic class rank, as rated by the agriculture teacher, and the program related views of the agricultural graduate; (4) membership in the FFA and SOEP and the occupational status of the agricultural graduate; (5) FFA degree held and the occupational status of the agricultural graduate; and (6) occupation of the father and the occupational status of the agricultural graduate.

Dunham, K. (1983) The status of supervised occupational experience programs in Utah vocational agriculture programs. Master of science thesis. Utah State University, Logan.

The purpose of this study was to determine the status of supervised occupational experience programs (SOEP) in Utah vocational agriculture programs. The study was also intended to identify student and teacher factors that related to participation in SOE programs. Second, third, and fourth-year Utah vocational agriculture students from 20 randomly selected high schools provided student data for this study. The vocational agriculture teacher(s) of the same high school provided teacher data. Two separate questionnaires were used to collect data from students and teachers. Utah students indicated that about 80 percent of them had SOE programs in 1982. About 54 percent of the teachers reported conducting programs in which at least 75 percent of the students participated in SOE programs. Significant factors related to student involvement in SOE programs included: times visited by the teacher, activity in the FFA, plans to enter an agricultural occupation, population of home area, assistance from teacher with SOEP, grade point average and occupation of parents. Significant factors related to teachers with high levels of SOEP involvement included: years of teaching experience, making the SOEP a requirement and making a portion of the students' grade dependent upon SOEP.

Ekpe, E. (1981) Some effects of crossbreeding on reproductive and productive performance of meat-type goats and their use in production programs in Nigeria. Master of science thesis. Utah State University, Logan.

This study was limited to 142 does and 130 kids at the International Sheep and Goat Institute, Utah State University in Logan, Utah. Records were kept from 1978 to 1980 on two genotypes--straightbred Spanish (meat-type) and Spanish X dairy

crosses--represented in these populations. Data were collected to measure doe body weights at prebreeding and postpartum, fertility and prolificacy, kid birth weights, sex, type of birth, body weights at weaning, feeding and carcass merit. Data analysis procedures included analysis of variance, means and standard deviations, regression analysis, and the Chi-square. Independent variables were year, date of kidding, date of weaning, sex of kid, type of birth, genotype, age of dam, interactions of sex X type of birth, sex X genotype, and genotype X type of birth. Highly significant difference due to year was evident in prebreeding weights while genotype effect was highly significant on postpartum weights. Only age of dam was found to be significant in percent fertility; however, age of dam and/or other independent variables did not have any significant influence on the prolificacy of the does. Highly significant differences in kid body weights at birth were due to genotype, date of kidding and year. These weight differences were also highly significant due to type of birth. Practical recommendations were also made to facilitate applicability of the programs to local situations where resources of subsistence farmers are highly limited.

Heflebower, R.F., Jr. (1982) The effects of plastic mulch and tunnels on yield and earliness of tomatoes. Master of science thesis. Utah State University, Logan.

"Early Girl" tomato plants were grown on clear plastic mulch, black plastic mulch, inside plastic tunnels, and with no treatment. Plants were measured for height, also blossoms and fruit-set were counted for the various treatments to help determine the effects of plastic treatments on plant maturity. Early in the season plants inside the plastic tunnels gave significantly less yield while plastic mulched plants gave significantly more. Late in the season plants inside the plastic tunnels gave significantly more yield than any of the other treated or control plants. At the present time, tomato plants mulched with clear plastic give the highest return for the money invested, as long as no additional cost is needed for weed control.

Hussein, A.A. (1983) A demonstration of the effects of Basic-H on corn production. Master of science thesis. Utah State University.

The purpose of this report is to consider the techniques necessary to transfer technology to both small and large-scale farmers in a developing region of the world and to test the result of using the new product which is called BASIC-H, a surfactant (soil wetting agent) on corn production through a

test demonstration which was conducted in Logan, Utah. The test was conducted primarily for experience with the demonstration methods and its use as a technique for technology transfer.

Inyang, E.G. (1983) A field demonstration of growing corn-sorghum mixed crop, corn single crop and sorghum single crop for silage in Cache Valley. Master of science thesis. Utah State University, Logan.

Although many experiments have been conducted relating to the production of corn silage and sorghum as single crops, little is known about their cultivation as mixed crops in Cache Valley. Mixed cropping of corn silage and sorghum has been known and practiced in Nigeria for many years, but no one has made a comparative and detailed study of yield differences between corn silage and sorghum singly or as inter-crops. The purpose of this demonstration is to show: (a) growth characteristics such as plant height and stalk size, (b) forage yield of the individual crops and mixed crops, and (c) the food value of each crop and crop combination in terms of energy, protein, and dry matter content. The objectives of the author are to learn the field demonstration technique as a teaching tool, and to prepare the author to teach its use to others in the Agricultural Extension Service in Nigeria.

Jensen, J.C. (1981) A study to determine desirable employee competencies and manpower needs for the Utah farm implement industry. Master of science thesis. Utah State University, Logan.

The purpose of the study was to gather descriptive data, determine the importance of the competencies needed for job entry, and assess the manpower needs of the Utah Farm Implement Dealership Industry. The target population was the entire farm implement dealership industry in Utah. The finished list contained 50 farm implement dealers in Utah. One dealer refused to fill out the questionnaire. The survey instrument consisted of three parts: a general information section designed to gather descriptive data, a section dealing with Utah farm implement dealers' ranking of entry level mechanical skills and knowledges, and a section dealing with agribusiness sales and service skills and personal qualities. Findings were: (1) 28 of the 30 Agricultural Mechanics competencies were rated at least "of some importance" to entry level workers; (2) the most important technical competency was the ability to perform preventive maintenance on agricultural equipment systems; (3) the least important competency was the ability to use surveying equipment and do surveying; (4) of the 21 agribusiness/interpersonal

competencies, all were said to be at least "important"; (5) desirable personal qualities such as honesty, sincerity, etc., received the highest ranking of the agribusiness/interpersonal skills; (6) knowing about advertising and promoting the sale of equipment received the lowest ranking of the interpersonal skills even though the mean was still above the "important" ranking; (7) there is a predicted 20.35 percent increase in full-time employees and a 15.87 percent increase in part-time employees in the two-year period of 1979 to 1981; (8) there was a 57 percent industry awareness of the agricultural equipment/machinery technology program offered by USU; and (9) 94 percent of the dealers preferred workers presenting specific job competencies at job entry.

Kesler, K. (1983) An analysis of the tasks performed by agricultural mechanics at a retail agricultural equipment dealership in Utah. Master of science thesis. Utah State University, Logan.

The purpose of this study was to determine which tasks were being performed by mechanics in an agricultural equipment dealership in northern Utah. This informaton was obtained by going to the dealership and recording on data forms the tasks which had been performed by using past work orders. As a result, 947 separate tasks were entered from separate work orders into the data. The findings of this study indicate: (1) 97.8 percent of tasks performed were accomplished in the dealership shop; (2) 58.3 percent of tasks performed were billed to the farmer, 29 percent were billed to the dealership, and 12.4 percent were charged to the manufacturer as warranty; (3) 74 percent of all equipment repaired was tractors; (4) this dealership serviced or repaired equipment manufactured by companies other than their own.

Riby-Williams, D. (1982) Application of the extension result demonstration model as a method of technology transfer (hybrid corn silage performance trials). Master of science thesis. Utah State University, Logan.

The report considers the techniques necessary for the transfer of technology to both small- and large-scale farmers in the developing regions of the world and it presents the results of a corn silage performance test demonstration conducted on a twelve-acre farm in Benson, Utah. The demonstration reported here is based on ten corn hybrids planted in six-row plots 660 feet long and replicated twice. Two center rows from each of the six-row plots were sampled for yield weights, nutritional value, and other measurements. The results of this test

demonstration are not intended to be a scientific measure of the production potential of the hybrids tested due to lack of replication. The test was conducted primarily for experience with the demonstration method and its use as a technique for technology transfer. Since all variables except hybrids are kept constant as possible, the results are of value to the cooperating farmer.

Torgerson, J.L. (1981) A comparison of the perceptions of agricultural professionals in Utah's production agriculture and at Utah State University of the competencies required of agricultural students entering the job market. Master of science thesis. Utah State University, Logan.

This study was limited to 56 teaching faculty members of the College of Agriculture, Utah State University, and 156 farmers in Utah's production agriculture. The purpose of this study was to determine how closely the perceptions of the farmers in Utah's production agriculture and agricultural University professionals at Utah State University were related regarding the importance of selected agricultural competencies. This study also considered the level at which the University agricultural professionals courses contributed to each of the 118 selected agricultural competencies. The findings of the study revealed that the agricultural instruction at USU is meeting the needs of farmers in Utah's production agriculture.

Williams, N.W. (1983) An evaluation of gains made by Utah 4-H members in animal science skills and life skills as a result of 4-H participation as perceived by members and parents. Master of science thesis. Utah State University, Logan.

The purpose of this study was to survey and measure gains made by Utah 4-H members in animal science skills and social/psychological skills as a result of 4-H participation. The survey used for this study was administered by county extension 4-H offices. As a result, 15 counties returned 226 usable responses of which approximately one-half were members and one-half were parents. The survey responses selections of: a lot, quite a bit, some, little, none, or do not know, were rated on a scale of five to zero. Members were asked to rate their own gains and parents were asked to rate their children's gains, as a result of 4-H participation, in 15 animal science skills and 28 life skills. The major conclusion of this study suggests 4-H members and their parents view the 4-H experience as contributing "quite a bit" to member development of animal science and life skills.

Hudson, C.J. (1983). Teacher competencies needed to utilize microcomputers in vocational agriculture. Doctoral dissertation, Virginia Tech, Blacksburg.

The problem of this study was to identify and evaluate the importance of teacher competencies needed to utilize microcomputers in vocational agriculture. Four rounds of the Delphi technique were used with a panel of 35 experts to identify and evaluate the competencies. Forty six of the 51 teacher competencies identified were recommended as being necessary to utilize microcomputers in vocational agriculture based on a rating of medium importance or higher by more than 50% of the panel of experts. It was recommended that the competencies be considered for use in (a) planning preservice instruction for prospective teachers of vocational agriculture, (b) planning inservice education courses for teachers, and (c) planning local vocational agricultural programs for secondary students and adults.

Malpiedi, B.J. (1983). Vocationalizing agriculture in the southern region: 1900-1927. Paper presented at the Southern Agricultural Education Research Meeting, July 1983, Raleigh, North Carolina. Virginia Tech, Blacksburg.

The historical study was conducted to describe agricultural education program changes during the period 1900 to 1927. Activities were summarized of selected institutions and individuals in the southern region of the United States. Two methods of securing data included a review of primary and secondary written sources and personal communications with Professor Harry W. Sanders, Robert A. Wall and Dr. Rufus W. Beamer. The personal communications revealed Professor's experiences with organizing the Future Farmers of Virginia and Smith-Hughes agricultural programs, Professor Wall's views of agricultural teacher preparation, and Dr. Beamer discussed his experiences as a student in vocational agriculture's formative years. The study also summarizes the political, economic, social and educational situat[illegible] of the south prior to and following passage of the Smith-Hughes Act of 1917. From 1918 to 1927, according to Federal Board for Vocational Education reports, funding for vocational agriculture in the south increased from $181,957.12 to $1,090,621.05. Programs increased from 200 to 2544 reimbursed units and numbers of teachers increased from 240 to 53,045. Numbers of teacher-training programs and student enrollment also increased dramatically. It was concluded that political, social, economic and educational trends play an important role for future decisions just as these factors influenced decision makers of the past.

Malpiedi, B.J. & Camp, W.G. (1983). An occupational market analysis of agricultural teacher education positions. Virginia Tech, Blacksburg.

The study surveyed all teacher educators in agricultural education in the United States. Objectives were to determine the status of the profession in terms of tenure, planned moves over the next five years, anticipated effects of RIF, and number of projected doctoral graduates. The study found that at least four times as many doctoral graduates will seek teacher education positions each year than the number of available positions. Overall 48 teacher educators expect to leave their positions over the next five years, 24 of those due to retirement. The study suggests that doctoral programs include training and experience in industrial/administrative areas to strengthen graduate opportunities in those types of positions." Other findings were that almost 90% of the profession are in tenure track lines and 73% of those are tenured. It was found that only one teacher educator position is expected to be lost to RIF over the next 5 years.

Rush, M., & Hillison, J. (1983). A national assessment of agricultural education student organizations. Staff study. Virginia Tech, Blacksburg.

The major purpose of the study was to determine the characteristics of student organizations in agricultural education departments in colleges and universities across the United States. A survey instrument was sent to 88 departments identified as having student organizations. The findings of the study indicated: (a) collegiate FFA with 47% of the organizations was the most popular, (b) 70% of the student officers were males, (c) 86% of the officers and 60% of the advisors supported national competition among student organizations, (d) agricultural education clubs believed recruitment/promotion and socialization should be most important, (e) agricultural education societies believed recruitment/promotion to be most important, (f) alpha tau alphas believed professionalism to be most important, and (g) collegiate FFAs believed recruitment/promotion, professionalism, and socialization to be most important. Major conclusions drawn were (a) agricultural education departments consider student organizations to be important, (b) the American Association of Teacher Educators in Agriculture form a committee to investigate the possibility of having national competition among student organizations, and (c) overall the officers and advisors agreed on objectives for the organizations.

Rush, M.G. (1983). Reduction in Force. Staff study, Virginia Tech, Blacksburg.

Reduction in force (RIF) has become an important issue in higher education. This study evaluated the scope of RIF in higher education, future trends for RIF, and faculty attitudes toward specific procedures associated with RIF.

The scope and future of reduction in force problems were evaluated through a review of current literature. Current faculty attitudes were determined through a small faculty survey at a traditional land-grant institution.

Most institutions of higher education do not have a RIF policy. In the absence of an institutional policy, the courts have played a major role in determining what can and cannot be done. Courts have generally held that institutions may fire tenured faculty provided they follow reasonable procedures. Those procedures do not have to include the involvement of faculty in RIF decisions.

A study of faculty at a traditional land-grant institution indicated that faculty wanted to be involved in RIF decisions, but did not agree on how a RIF should be implemented.

WASHINGTON

Adams, Richard, & Cvancara, J. G. (1982). An apple production guide for vocational agricultue instructors in central Washington, Masters degree special problem - curriculum, Washington State University, Pullman.

This study was developed to assist teachers of vocational agriculture with an up-to-date, easy-to-use resourse dealing with apple production in central Washington. This guide is divided into units representing major areas in the apple industry and conveniently includes an introduction, information sheet, test and answer sheer for each unit.

Cvancara, J. G. & Weaver, Carol L. (1982). Leadership development through planned instruction in vocational education: staff study, Washington State University, Pullman.

This study was developed to assist teacher in implementing leadership development as an integral component in vocational education. The manual includes instructional materials and strategies which will assist students to utilize their classrooms and laboratory for acquiring and applying leadership skills.

Hickman, Michael J. (1982). Current status of supervised occupational programs in vocational agriculture in Washington State, Masters study, Washington State University, Pullman.

This study was developed to determine the current status of supervised occupational experiences in Washington State. By using criteria developed at the regional level, the objective was to make comparisons, conclusions and recommendations for the Western region. Information gathered included the [illegible] of SOE, value of SOE, kinds of SOE [illegible] SOE between each major tuxonomy' [illegible] agriculture and demographer information. [illegible] agriculture instructors and eleventh and twelveth grade students were surveyed in the study.

Hill, George C. (1982). A factor analysis of semantic differential scales on vocational agriculture concepts, Phd. study, Washington State University, Pullman.

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The problem of this study was to determing the factorial structure of Osgood, Suci, and Tannenbaum's traditional semantic differential (SD) scales on vocational agriculture concepts. It was concluded that SD scales should be factor analyzed when used with different sets of concepts. Assuming that scales will maintain their traditional factor structure can lead to erroneous results and conclusions.

Milliken, Dennis, & Cvancara, J. G. (1982). A teacher's guide for the preparation and implementation of FFA agricultural mechanics contest, Masters degree special problem - curriculum, Washington State University, Pullman.

This study was developed to complement instruction in agricultural mechanics. The purpose of this guide was to aid vocational agriculture instructors in Washington to implement agricultural mechanics contest at the local level and to improve preparation and performance of teams at state contests. Questions and problems were also included in this project to provide instructors with exemplary materials for use in training their students for agricultural mechanics contests.

Parkert, Gary M. (1982). Law and agriculture in Washington State, Masters degree special problem, Washington State University, Pullman.

This curriculum guide was developed to provide information for agriculturalists in many areas commonly encountered by individuals involved in the agricultural industry. The major areas of law as it deals with agriculture include the Judicial System, Contract Law, Torts, ownership of land and water rights.

Wallace, Dennis L. & Cvancara, J. G. (1982). A self-contained parliamentary learning activity unit for vocational agriculture students: Masters degree special problem - curriculum, Washington State University, Pullman.

This self-contained unit on parliamentary learning activities is intended to help both vocational agriculture instructors and students incorporate parliamentary skills and usage into an individualized learning package. Special attention has been given to parliamentary skills definitions, methods of stating motions, governing rules of motions, precedence of motions, questions and answers, and examples for use in meetings.

Uhling, Lawrence R. (1982). An irrigation guide for vocational agriculture instructors in Washington State. Masters special problem - curriculum. Washington State University, Pullman.

This curriculum guide was designed for vocational agriculture instructors who have a need to teach concepts of irrigation. It can be used as a special one-semester course or used to supplement crop production, soils or horticulture instruction.

Coyne, Danny M. (1983). A curriculum guide for milk quality and dairy products evaluation, masters special problem, Washington State University, Pullman.

This curriculum guide is to encourage vocational agriculture instructors to expose their students to milk quality and diary products evaluation. The project will partially forgo the need for the instructor to spend time preparing lessons on the topic. The guide was developed to provide basic informantion on milk quality and dairy products evaluation.

WEST VIRGINIA

Bennett, John D. (1983). A study to determine how the West Virginia vocational agriculture teacher uses his time. Masters thesis, West Virginia University, Morgantown.

This study was designed to determine the amount of time utilized by West Virginia Vocational Agriculture teachers in performing their professional obligations. Data was obtained from fifteen vocational agriculture teachers who recorded time spent in various professional activities from September 1978 through August 1979. Major findings were that West Virginia vocational agriculture teachers work an average of 40.6 hours per week in meeting their professional obligations. Number of hours worked is not influenced by marital status, age, degrees held or years of teaching experience. Operation of a farm or business by the teacher reduces the number of hours spent in job-related activities. Teachers in single teacher departments work longer hours than do those in multiple-teacher departments.

Dlamini, Barnabas (1982). Evaluation of the agriculture program in the secondary schools of Swaziland as perceived by agriculture teachers and headmasters. Masters thesis, West Virginia University, Morgantown.

The primary objective of this study was to determine the extent to which the secondary agriculture program in Swaziland is meeting the originally stated objectives. Questionnaires were designed to collect appropriate data from agriculture teachers and headmasters. Respondents indicated that the original objectives were being met. However, a need was indicated to (1) strengthen teaching of the role and methods of the extension services, (2) have separate vocational agriculture classes, (3) organize a national agriculture youth club as an integral part of the offerings, and (4) teach the present program of general agriculture to all students.

Dlamini, Ruth M. (1983). The role of coordinator in the instruction of agriculture in Swaziland schools as perceived by coordinators, principals and teachers. Masters thesis, West Virginia University, Morgantown.

This study was designed to determine the role of the coordinator in Swaziland's secondary schools agriculture program. Data were collected by means of a questionnaire designed to elicit perceptions of teachers, coordinators and principals. The three groups perceive the work of the coordinator to be concerned with improvement of instruction in agriculture. They are skeptical of the coordinator's involvement in assisting teachers to develop

mastery of agricultural subject matter.

Hanna, Michael Woody (1983). The need for livestock and poultry production workshops as perceived by vocational agriculture teachers and county agricultural extension agents of West Virginia. Masters thesis, West Virginia University, Morgantown.

The purpose of this study was to determine the need for additional training in livestock and poultry production skills by vocational agriculture teachers and county extension agents. Data were obtained from questionnaires mailed to all teachers and agents in West Virginia. It was found that additional training is desired in 67 livestock and poultry production skill areas, training needs are greatest in livestock skills, and years of experience significantly influences perceptions of additional training needs.

Lawrence, Layle D. (1983). Evaluation of required courses in the agricultural education curriculum, 1983. Staff study, West Virginia University, Morgantown.

This study was designed to determine if courses specified by current requirements are of sufficient value to the vocational agriculture teacher to justify their continuation in the agricultural education curriculum. Graduates who had completed the agricultural education program from 1976 through 1982 and who were teaching or had taught vocational agriculture were asked to evaluate required courses regarding course content, value in teaching, and to opine whether or not each course should remain in the curriculum. Of the 45 individuals who received the survey form, 41, or 91 percent, responded. Respondents rated content and value of agricultural and agricultural education courses highly. They considered biology, chemistry and English courses to be of some value, but were critical of college algebra. Participants were particularly critical of content and value of courses in professional education, particularly Reading in the Content Areas, Principles of Education and Educational Psychology.

Lawrence, Layle D. (1983). Success of former vocational agriculture students in College of Agriculture curricula. Staff study, West Virginia University, Morgantown.

Objectives of this study were to determine if former students of vocational agriculture do as well as others in agriculture curricula at West Virginia University with regard to overall grade point average and performance in basic common courses. Data were collected from student files in the Student Records Offices. Students who entered the University as freshmen and who graduated from an agricultural curriculum during the 1982 and 1983 academic

years were studied. It was concluded that (a) former students of vocational agriculture do as well as those without vocational agriculture in agriculture curricula, and (b) students who had vocational agriculture do better in some beginning agriculture courses, chemistry and biology.

Tumusiime, Edward K. (1983). Problems that hamper success of county 4-H programs. Masters thesis, West Virginia University, Morgantown.

The purpose of this study was to identify specific problems in initiating and operating 4-H youth activities which most seriously hamper success of county 4-H programs. Data were obtained from 4-H State Leaders and Program Specialists through the delphi technique. Of the 74 major problems identified by participants, those considered particularly serious were: staff do many things volunteer leaders should do; underuse of older 4-H members in program development; and lack of sufficient data to show impact of projects and programs on 4-Hers.

Umar, Mohammad (1983). The effectiveness of radio agricultural programs in promoting development as perceived by progressive farmers in the Northern Division of Fiji Islands. Masters thesis, West Virginia University, Morgantown.

The main purpose of this study was to determine the effectiveness of 'Radio Agricultural Programs' in promoting development as perceived by progressive farmers in the Northern Division of Fiji Islands. A field survey was performed by extension officers. Data were obtained from 230 farmers. Findings suggest that a large number of progressive farmers own a radio, receive clear reception and spend many hours listening to radio during the week. Farmers listen to most programs broadcast by Radio Fiji including the 'Farmers Programs.' Most farmers were satisfied with air-time allotted to 'Farmers Programs,' with content and with times during the week when the program is broadcast in the three major languages. Farmers tend to find 'Farmers Programs' highly useful as an informational source of new agricultural ideas and techniques.

RESEARCH AND DEVELOPMENT

ACTIVITIES IN PROGRESS

ALASKA

Kirts, C.A. Development of a handbook for conducting Alaska state FFA contests. University of Alaska. University of Alaska, Fairbanks.

FLORIDA

Arrington, L.R. and Reimiller, E.A. A follow-up of 1983 Florida vocational agriculture program completers. University of Florida, Gainesville.

Cheek, J.G., McGhee, M.B. Assessment of competencies possessed by students enrolled in applied principles of agribusiness and natural resources occupation program phase II. Agricultural and Extension Education. University of Florida, Gainesville.

Cheek, J.G., McGhee, M.B., Martin, M.P. A follow-up study of agricultural and extension education graduates from 1976-1983. Agricultural and Extension Education. University of Florida, Gainesville.

Maday, J.A. (1983). Develop and field test written and performance student achievement measures for agricultural machinery and equipment operator and maintenance person. Division of Vocational Education, Florida Department of Education. University of Florida, Gainesville.

McGhee, M.B. Knowledge and awareness of Florida cooperative extension agents concerning low energy technology activities of the Institute of Food and Agricultural Sciences. Department of Agricultural and Extension Education, University of Florida, Gainesville, Florida.

McGhee, M.B., Cheek, J.G. Assessment of competencies possessed by students enrolled in fundamentals of agribusiness and natural resources occupations program-phase II. Agricultural and Extension Education. University of Florida, Gainesville.

Straughn, A.A. & Andrew, R.C. County extension agents turnover study on voluntary separation. Florida Cooperative Extension Service. University of Florida, Gainesville.

Summerhill, W.R. and Taylor, C.L. Agent utilization of evaluations of extension in-service education programs: a metaevaluative approach. University of Florida, Gainesville.

IDAHO

Ledington, Richard L., and Pals, Douglas A. Idaho vocational agriculture curriculum guide in crop and soil science. A staff project. University of Idaho, Moscow.

Pristupa, David W. A study of the status of supervised occupational experience programs of Idaho vocational agriculture students. Master of Science thesis. University of Idaho, Moscow.

ILLINOIS

Hahn, David and Reneau, Fred. An Analysis of Microcomputer Usage in Illinois Vocational Agriculture Programs. Southern Illinois University, Carbondale.

Harun, Abu and Legacy, Jim. An identification of Reasons Which Lead Students to Select Agriculture as a Major Area of Study in Malaysia. Southern Illinois University, Carbondale.

Kargbo, Christian and Legacy, Jim. An Analysis of the Goals Accomplished by Six Vocational Agriculture Program Components. Southern Illinois University, Carbondale.

Memmesheir, Pat and Legacy, Jim. A Determination of the Content Items used to Teach Extension Education Classes at U.S. Colleges of Agriculture. Southern Illinois University, Carbondale.

Roider, Rose and Reneau, Fred. Vocational Agriculture Teachers' Attitude Toward SOE Programs. Southern Illinois University, Carbondale.

Henderson, J.L. Microcomputer use in Illinois vocational agriculture programs. Staff study. Department of Vocational and Technical Education, University of Illinois, Champaign-Urbana.

Law, D.A. County extension adviser's self-perception of job competence, job satisfaction, and need for additional training in relation to job duties and selected demographic characteristics. Doctoral dissertation. Department of Vocational and Technical Education, University of Illinois, Champaign-Urbana.

Osborne, E.W. Use of the Problem Solving Approach to Teaching by University of Illinois Student Teachers and Beginning Teachers. Staff study. Department of Vocational and Technical Education, University of Illinois, Champaign-Urbana.

Pepple, J.D. and Henderson, J.L. Analysis of Morale and Problems of Beginning Vocational Agriculture Teachers in Illinois. Staff Study. Department of Vocational and Technical Education, University of Illinois, Champaign-Urbana.

Pepple, J.D. and Russell, E.B. Evaluating Change Orientation of Vocational Agriculture Teachers in Illinois. Staff Study. Department of Vocational and Technical Education, University of Illinois, Champaign-Urbana.

Russell, E.B. and Courson, R.L. Illinois Core Curriculum in Agriculture - Phase V. Staff Study. Illinois State Board of Education. University of Illinois, Champaign-Urbana.

INDIANA

Peters, J.L. Development of student assisted instruction modules. Agricultural Education, Purdue University, West Lafayette, Indiana.

Peters, J.L. Use of reflective teaching in an introductory teacher education course. Agricultural Education, Purdue University, West Lafayette, Indiana.

IOWA

Brase, Terry. An analysis of principals and vocational agriculture teachers personal and professional relationships in Iowa. Master of Science Thesis, Iowa State University, Ames.

Carter, R.I. Community organizations and their role in the leadership development of youth. Staff study, Iowa State University, Ames.

Carter, R.I. Profiles of entering students in agricultural education from 1980-83. Staff study, Iowa State University, Ames.

Gamon, J.A. Experimental evaluation of instructional materials on delegation for 4-H youth. Doctora of Philosophy Dissertation, Iowa State University, Ames.

Gonzalez, Roberto. Perceptions of agriculturalists in Costa Rica on the use of television in pesticide education. Doctor of Philosophy Dissertation, Iowa State University, Ames.

Graham, V.E. Principal and instructor perceptions of year-long and semester course structures for vocational agriculture. Master of Science Thesis, Iowa State University, Ames.

Green, J.T. Perceptions of contestants participating in selected National FFA contests. Master of Science Thesis, Iowa State University, Ames.

Haskell, L.J. The attitudes of extension staff and clientele groups regarding the future role of the Cooperative Extension Service. Doctor of Philosophy Dissertation, Iowa State University, Ames.

Johnson, C.A. Components of leadership development through 4-H programs and their implementation. Master of Science Thesis, Iowa State University, Ames.

Johnson, W.W. FFA participation and personal development on Iowa Farmer Degree recipients. Master of Science Thesis, Iowa State University, Ames.

Kahler, A.A. Development and evaluation of alternative delivery systems for secondary agricultural agribusiness education programs. Staff study, Iowa State University, Ames.

King, D.W. Problems and concerns of vocational agriculture teachers in Iowa. Master of Science Thesis, Iowa State University, Ames.

Klein, W.C. High school participation and personal development as perceived by freshmen in the College of Agriculture. Master of Science Thesis, Iowa State University, Ames.

Merron, James. Experimental evaluation of an instructional unit in soybean production. Master of Science Thesis, Iowa State University, Ames.

Miller, Dennis. Analysis of DHIA participation by dairy producers in the Starmont Community School District. Master of Science Thesis, Iowa State University, Ames.

Miller, W.W. A survey of the use of computers in Iowa secondary and post-secondary agriculture programs. Staff study, Iowa State University, Ames.

Miller, W.W. An evaluation of the effectiveness of video-cassette modules in influencing students' perceptions of selected teacher characteristics. Staff study, Iowa State University, Ames.

Richardson, J.G. An assessment of attitudes and skills of Iowa Cooperative Extension Service personnel in microcomputer technology. Doctor of Philosophy Dissertation, Iowa State University, Ames.

Rutachokozibwa, Vedasto. Educational strategies for agriculture and rural development in Tanzania. Doctor of Philosophy Dissertation, Iowa State University, Ames.

Sanggin, Spencer. An evaluation of extension training programs conducted by the Department of Agriculture in Sarawak, East Malaysai. Master of Science Thesis, Iowa State University, Ames.

Shafiq, Muhammad. A follow-up study of agricultural education graduates at the University of Agriculture, Faisalabad, Pakistan. Doctor of Philosophy Dissertation, Iowa State University, Ames.

Sunderhaus, T.L. Problems and concerns of vocational agriculture instructors in Indiana. Master of Science [illegible], Iowa State University, Ames.

Umana, Francisco. An assessment of the core competencies needed by extension agents in Costa Rica. Master of Science Thesis, Iowa State University, Ames.

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Wyatt, Gary. Use of computers in teaching vocational agriculture in Iowa. Master of Science Thesis, Iowa State University, Ames.

LOUISIANA

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Burnett, M.F., Harrison, B.C. and Ganeson, V. Factors influencing vocational teacher career change and implications for teacher education curricula. Funded by the Office of Vocational Education, Louisiana Department of Education. Louisiana State University, Baton Rouge.

Burnett, M.F. and Ganeson, V. The course of study in Vocational Agriculture for grade 7 and grade 8 for Louisiana schools. Staff study. Louisiana State University, Baton Rouge.

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Camp, S.S. Status of vocational agriculture summer programs in the United States. Doctoral dissertation. Louisiana State University, Baton Rouge.

Camp, S.S. and Kotrlik, J.W. Development of guidelines for the summer phase of vocational agriculture programs. Staff study. Louisiana State University, Baton Rouge.

Grady, T.L. The relationship of teacher performance to job satisfaction of vocational agriculture teachers in Louisiana. Doctoral dissertation. Louisiana State University, Baton Rouge.

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Woodley, W.S. The relationship of selected teaching variables and teacher effectiveness with scholarliness of agricultural teacher educators in the United States. Doctoral dissertation. Louisiana State University, Baton Rouge.

MARYLAND

Cooper, E.L., Nelson, C.L., and Holmberg, I.D. "Employment and Entrepreneurship Trends in Maryland." Maryland Agricultural Experiment Station, T-32, University of Maryland, College Park.

Cornett, T.L. and Cooper, E.L. "Agribusiness Employment Needs on the Upper Eastern Shore of Maryland." Field Problem, University of Maryland, College Park.

Gillus, D.L., Cooper, E.L, and Nelson, C.L. "Farm and Agribusiness Employment Needs in Central Maryland." Master's Thesis, University of Maryland, College Park.

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MICHIGAN

Cooper, C.R., and Ploor, M.L. Connections (Food Processing: 2002): Development of a preliminary model to integrate business/industry, university, and government sectors to explore and act upon an opportunity focus. Staff study. Max and Victoria Dreyfus Foundation. Michigan State University, East Lansing.

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Karelse, R., Olson, C., et al. Task based curriculum for horticulture. Michigan Department of Education, Michigan State University.

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Heiman, T.W. Articulation activities between public school secondary and two-year postsecondary vocational agriculture programs in Missouri. Doctoral dissertation. University of Missouri-Columbia, Columbia.

Hunter, W.P. An analysis of the relationship of selected cost factors on the net farm income of enrollees in the Missouri farm business management program. Doctoral dissertation. University of Missouri-Columbia, Columbia.

Robison, J.G. The relationship of selected indices and the net farm income of Missouri farm business management enrollees. Doctoral dissertation. University of Missouri-Columbia, Columbia.

Rohrbach, N.F. The use of microcomputers in teaching graduate students in agricultural education. Doctoral dissertation. University of Missouri-Columbia, Columbia.

MONTANA

Crandell, B. Assessment of mean importance of selected energy technology program goals as perceived by selected energy technology teacher educators. Agricultural and Industrial Education Department. Montana State University, Bozeman.

Gillespie, W.H. A follow-up of industrial arts graduates of Western Montana College. Agricultural and Industrial Education Department. Montana State University, Bozeman.

Kapston, D.M. Frequency of use and perceived value of SOEP and related instructional activities. Agricultural and Industrial Education Department. Montana State University, Bozeman.

Petroff, A.R. Factors related to drop out and retention rates of 4-H boys and girls ages 13-15 in selected counties in Montana. Agricultural and Industrial Education Department. Montana State University, Bozeman.

Schaff, G.L. Computer competencies for agribusiness in Yellowstone County. Agricultural and Industrial Education Department. Montana State University, Bozeman.

Taylor, W.R. A study to examine why Montana vocational agriculture teachers leave teaching. Agricultural and Industrial Education Department. Montana State University, Bozeman.

Wolfe, T.W. Factors influencing 4-H leader tenure in Montana. Agricultural and Industrial Education Department. Montana State University, Bozeman.

NEBRASKA

Dillon, R.D. Preservice Evaluation of Student Teachers and of Student Teaching Centers. Staff Study. University of Nebraska, Lincoln.

Barrett, L.A. Personality types of Agriculture College Majors and their Relationships to GPA, SAT, mode of teaching and learning styles. College of Agriculture, University of Nebraska, Lincoln.

Horner, J.R. Effectiveness of an Innovative Leadership Development Program, Staff Study, University of Nebraska, Lincoln.

Foster, R.M. & Miller, W.W. Microcomputer Competencies need by Vocational Agriculture Instructors in Nebraska and Iowa. Departments of Agricultural Education, University of Nebraska and Iowa State University. (joint study).

Foster, R.M. Identification of Factors Which May Hinder Vo Ag Student Participation in Quality SOE Programs in Nebraska. Department of Agricultural Education, University of Nebraska.

NEW MEXICO

Frankeberger, Kevin. Equine skills of New Mexico vocational agriculture students. Master's thesis. New Mexico State University, Las Cruces.

Gilpatrick, Jennifer. Employers, students, and teachers perceptions of the value of supervised occupational experience programs. Master's thesis. New Mexico State University, Las Cruces.

Lopez-Gonzalez, Epamindo. Perceived assistance provided by agents of the Honduran Coffee Institute to Honduran coffee growers. Master's thesis. New Mexico State University, Las Cruces.

NEW YORK

Berkey, A.L., Cushman, H.R., and Sutphin, H.D. The northeast change strategy for supervised occupational experience programs in agriculture. Staff study. Agricultural and Occupational Education. Department of Education. College of Agriculture and Life Sciences. Cornell University, Ithaca.

Gifford, G.L. The role of day part-time faculty in selected up-state New York community colleges. Doctor of Philosophy Dissertation. Cornell University, Ithaca.

Hosseini, M.S. A model for a new educational-developmental institution for training rural developers in Iran: a needs-based design. Doctor of Philosophy Dissertation. Cornell University, Ithaca.

Ogden, A.B. Significance of the relationship dimension in job satisfaction of associate nurse graduates in first year of employment. Department of Education. College of Agriculture and Life Sciences. Cornell University, Ithaca.

Penrod, K.M. Students', teachers' and administrators perceptions of occupational experience programs in New York state. Doctor of Philosophy Dissertation. Cornell University, Ithaca.

Sutphin, H.D. and Berkey, A.L. Development of a preservice and inservice model and resource guides on instructional applications of microcomputers in New York secondary, post-secondary and extension programs in agriculture. Cornell University, Ithaca.

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Vockroth, R.W. A study of selected factors relating to retention of adult learners in two-year colleges. Doctor of Philosophy Dissertation. Cornell University, Ithaca.

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Fegert, Wallace R. Problems of First Year Vocational Agriculture Instructors in Minnesota, Montana, North Dakota and South Dakota. Master of Science Colloquium Paper, North Dakota State University, Fargo.

Franzen, Robert J. Attitudes of North Dakota Vocational Agriculture Instructors Toward Supervised Occupational Experience Programs. Master of Science Colloquium Paper, North Dakota State University, Fargo.

Torgerson, Keith Expectations of Farmers Enrolled in the Adult Farm Management Education Program in North Dakota. Master of Science Colloquium Paper, North Dakota State University, Fargo.

OHIO

Barrick, K. National data collection system for vocational agriculture, SOEP and FFA. Staff study. The Ohio State University, Columbus.

Barrick, K. & Caplinger, C. Community development instruction in vocational agriculture. Staff study. The Ohio State University, Columbus.

Barrick, K. & Frankeberger, K. Perceptions of duties and responsibilities of local vocational education supervisors. Staff study. The Ohio State University, Columbus.

Behm, K. Evaluation of the litter-control program of the Ohio Cooperative Extension Service. Ph.D. dissertation. The Ohio State University, Columbus.

Burke, S. Comparative study of vocational agriculture students academic success in postsecondary agriculture programs at the Agricultural Technical Institute. Staff study. The Ohio State University, Columbus.

Etuk, L. Factors relating to the commitment of vocational agriculture teachers to their profession. Ph.D. dissertation. The Ohio State University, Columbus.

Falakdine, D. Mathematical problem solving skills of high school vocational agriculture students. Ph.D. dissertation. The Ohio State University, Columbus.

Fix, M.L. Perceived needs of Ohio dairy goat programs as seen by 1982 members. Master of Science thesis. The Ohio State University, Columbus.

Flasher, D. Program priorities of older 4-H youth. Master of Science thesis. The Ohio State University, Columbus.

Gliem, J.A. Problem solving abilities of former vocational agriculture students in a beginning agricultural mechanics course. Staff study. The Ohio State University, Columbus.

Igodan, C.O. Factors associated with job stress (burnout) among extension agents in the Ohio Cooperative Extension Service. Ph.D. dissertation. The Ohio State University, Columbus.

Jolliff, B. Social recreation: 4-H club recreation leader's handbook. Master of Science thesis. The Ohio State University, Columbus.

Knight, J.A. The Agricultural Education Magazine 1929-1984 a content analysis. Staff study. The Ohio State University, Columbus.

McCracken, J.D.; Barrick, R.K. & Beard, E.M. Occupational goals, reasons for enrolling, personal information, and occupational experience programs of vocational agriculture students from families who farm full-time, part-time, or not-at-all. Staff study. The Ohio State University, Columbus.

Miller, Juanita. Urban extension 4-H programs in Ohio. Ph.D. dissertation. The Ohio State University, Columbus.

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Othman, E. Index of extension education research. Master of Science thesis. The Ohio State University, Columbus.

Oto-France, A. Perceptions of selected extension groups concerning the importance and extent of performance of tasks by area agricultural industries program planning committees. Ph.D. dissertation. The Ohio State University, Columbus.

OKLAHOMA

Key, J.P. and Finley, C.E. Impact of a wheat integrated pest management program in a four county area of Oklahoma. Staff study. Oklahoma State University, Stillwater.

Khemtong, P. An assessment of the effectiveness of selected aspects of the student teaching program in vocational agriculture as presently provided at Kasetsart University. Doctoral dissertation. Oklahoma State University, Stillwater.

Morgan, [illegible] Comparison of selected characteristics of vocational agriculture departments in the Northwest District of Oklahoma based upon high, medium or low levels of livestock show participation. Masters thesis. Oklahoma State University, Stillwater.

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Shumaker, C.G. Factors affecting the return of former vocational agriculture teachers to the profession. Masters thesis. Oklahoma State University, Stillwater.

White, J.D. and Finley, G.E. Perceptions of the Food for America Program - a national study. Staff study. Oklahoma State University, Stillwater.

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REGIONAL SUMMARIES (1968-1974)

Year	Regions			
	Central	North Atlantic	Pacific	Southern
1968-1969	ED 036 642		ED 036 635	ED 038 543
1969-1970	ED 047 107	ED 047 108	ED 147 110	ED 047 109
1970-1971	ED 057 252	ED 061 415	ED 061 447	ED 061 446
1971-1972	ED 076 800	ED 107 904	ED 078 164	ED 079 472
1972-1973	ED 103 694	ED 107 903	ED 109 376 (1972-1974)	ED 110 745
1973-1974	ED 110 660	ED 110 792		ED 110 746

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The Summaries of Research and Development Activities in Agricultural Education were compiled nationally for the first time in 1974-1975. Data pertaining to location of previously compiled national summaries may be found displayed in Table II.

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NATIONAL SUMMARIES (1974-1982)

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1975-1976	ED 134 107
1976-1977	ED 151 532
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1978-1979	ED 187 894
1979-1980	ED 205 706
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1981-1982	Number to be assigned

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PREVIOUS NATIONAL EDITORS

Summaries of Research and Development
Activities in Agricultural Education

1974-1975 - Dr. J. David McCracken, The Ohio State University
1975-1976 - Dr. J. David McCracken, The Ohio State University
1976-1977 - Dr. Alfred J. Mannebach, The University of Connecticut
1977-1978 - Dr. Alfred J. Mannebach, The University of Connecticut
1978-1979 - Dr. Jimmy G. Cheek, The University of Florida
1979-1980 - Dr. Jimmy G. Cheek, The University of Florida
1980-1981 - Dr. Joe W. Kotrlik, Louisiana State University
1981-1982 - Dr. Joe W. Kotrlik, Louisiana State University
1982-1983 - Dr. William G. Camp, Virginia Tech

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